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Neither the country or Quarter of the Globe where ship derived its origin is known, but the nations who seem most entitled to the honor are the Phenicians and Egyptians, = The enterprising spirit of the Phenicians, and the advantageous situation of their two principal cities Tyre & Sidon. urged them gradually to the most bold enterprises and raised them to an unrivalled preeminence as navigators a= mong the nations who surrounded them and enabled them to engross almost to themselves the commerce of the universe.

The Barques employed on the Nile by the Egyptians must have been exceedingly rude in structure, = they appear to have been formed of small planks or rather blocks made nearly square about three feet each way, cut from the Acan= thus or Egyptian thorn, those blocks laped over each other like tiles & were fastened together with wooden pins & this mode of construction was found sufficiently strong for the pur= poses to which they were applied,

When a young man arrives at the age of 13. or 14. he usually looks round upon the different occupations of his fellow man, for the purpose choosing from so vast a variety, some Profession for life, and it is not uncommon that many of them choose either the Army or Navy. I my self have been in both and have at length come to the conclusion that it is decidedly better to be born with a silver spoon in the mouth and have nothing to do with either, But all must not be of this opinion, or we should have neither Army or Navy; = besides a man must do something to keep up appearances. and a bad tenant is sometimes better than an empty house; I have now been five years in the Navy and ought to know something about the usages of the Sea service, and as I expect to attend next May twelve months before the Board of Examiners for promotion, I have determined to draw up a little manuscript of the usual formalities observed on such occasions, together with a sketch of seamanship &c. in order that I may be able to turn the tables and be prepared for them, besides it may be useful to some of my friends who shall come after me, at all events it will keep me employed for a short time &.

thus make one idle head for the devil to work in
I know my self that while we are Midshipmen
we are constantly annoyed with Mid watches, Quarters,
inspection of Bags, and such like most ungentle
duties of the Service, But the Service make no allow=
ances for that, and youth is the proper time to perfect
one's self in his profession, so that he may be able to out=
wit the old stubborn Sea Dogs who yearly sit in Wis=
dons Hall for the express purpose of fathoming him. In
sounding amid the vast ocean of an Ensigns intellect
where he is deep, where shallow, where rude and
unsophisticated, where courteous & polished, in other
words to learn whether he is deserving to receive a
warrant as Passed Midshipman, & in time become
like one of them, or whether he is incapacitated and
unfit for so responsible an Office. Ergo, Julius. do
not neglect to learn at least enough of Seamanship
to teach the old Fogies into the belief that you are a
pretty good Sailor, do not when you come off on
watch in the morning watch, say. damn my bloody eyes. I can=
not steady to day, by God, damn me. if I stay in the service
where we have to be on Deck at all times in the rain
& sunshine, and then expected to study navigation

the rest of the day. do not say this Julius, nor do not do this; remember that while you are a Midshipman you are only on a state of probation, a Pilgrim to a higher rank. a traveller to a nobler stay. therefore dayeth Julius do not say so. but rather eat a good breakfast (for the morning watch gives us an appetite) and take glass of claret (but nothing stronger) and if necessary a little snooze, and rise refreshed, and set two and improve your mind, paying particular attention to Mathematicks, Navigation & Astronomy. it is part of any Gentlemans profession, do this once now & then chime in a little French or Italian, & other such little accomplishments and then if you always wear a clean shirt & wish to leave the Service, you can always comfort yourself with saying I have not lost my time, Thank God I can live any where, always get along. and though I am not homeward yet I am vastly Genteel,

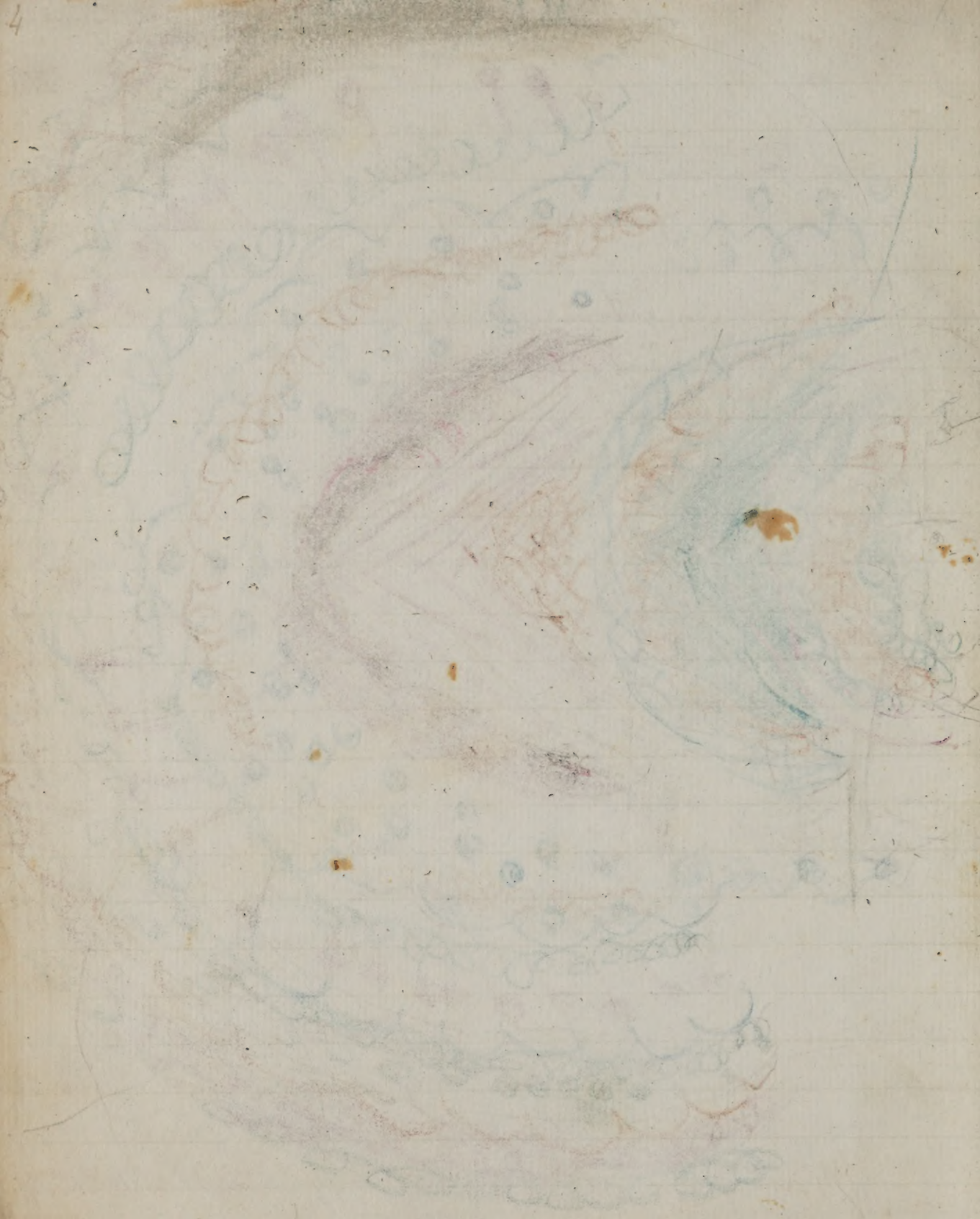
Thus Sayeth
Julius.

On the 5th day of the Fourth Month. 1839.

United States Frigate Columbia China Sea

Lat 4°. 26'. North

Longitude. 105°. 38' East



Here then for a commencement- I will suppose myself just- ushered into the presence of several old Post Captains for examination. under such a dialogue appears to. to. be the most proper form of drilling one off for such an occasion I shall adopt it in this instance.

Persons Dramatis.

Midshipman-

Board of Examiners

Board. Good morning Sir

Midshipman. Good morning Gentlemen I feel honored to meet you

Board. You have been to sea Sir previous to

what Ships have you been sailing in,

M. I reported for Duty to Com[o] Warrington on the 4[th] of July 1834. on board the Sloop of War Fairfield & sailed in her for the Mediterranean the same year Aug[t] the 8[th] and after completing that cruise which lasted nearly three years I

performed a second voyage in the U. S. Frigate Columbia around the World.

B. How old are you Mr

M. I was born on the 27th of April 181 and shall if I live to see next [illegible] be [illegible] years of age.

Q. Have you any letters from your commanders.

A. Yes Sir I have the pleasure to present you with one from Captn Connor My commander in the Adams during the first part of her cruise. as well as another from Captn Ewing from his commander from the time that Captn Connor left us until the arrival of the Adams to U. States: = This is one from Commodre Rodgers the Commander of the Columbia.

Q. Well Mr We will suppose that a Ship is in the stream having just been launched, we wish you to get on board her lower masts, Proceed and discribe to the board how you would do it.

A. As soon as the Ship was launched I should take her draft, and with a stick in each gang way ship on board a sufficient quantity of Ballast to steady her, which I should stow amidships to prevent her from hogging & to keep her on an even keel. Then if I was not at a navy Yard where

in each regular Shears for getting in the masts. & should rig a pair on board and rig the masts in with them

Get on Board the Sheer Legs.

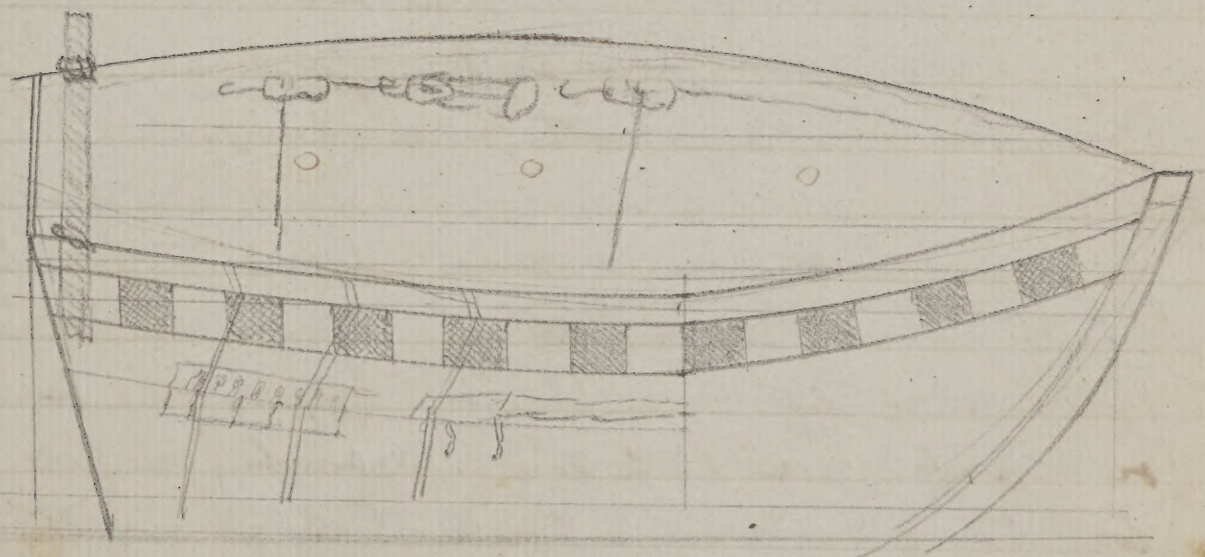
And as it would be necessary to purchase the Sheer legs on board, I should in the first place prepare my ship for receiving them, by shoring up the decks from the skin to the Upper Deck Fore & Aft. particularly under the Beams at the breast of the Partners, then laying a strong Apron athwart the Ship near the Capstan lash it well to the Gunwales on each side, for the heads of the Shears to rest on when they are hoisted on board each also to give them an angle in rising: I would also put Mats on the Quarter Galleries, & each Scuttle strong pine boards, which had previously rounded on top; to this to the Gunwale, in the wake of the Purchases, to prevent them from chafing the ships sides, & then after placing skids from the Gunwale to the ships deck in board, to case the Shear legs down on, and others from the Gunwales to the Channels out side, as also slinging other skids from the Channels to the water edge, I would be ready launching my Shear legs which I would rest also, each

tow them along side with their heads aft.

Having the shun legs along side I would take two boat-hawsers, one for the main & the other for the counter parbuckle; middle each, and wear the two ends of the one through two of the After Ports, having five or six Ports, or such a distance intervening, wearing it from outside in board, i.e. with the bight outside. This is to be my main Parbuckle, I now throw the ends over the gunwale and pass them down under the head & heel of one shun leg, and bringing the ends up again over the bulwarks, lead them through snatch blocks hooked in the opposite waterways, and clap luff tackles on them, ready for walking away. This done I would wear the other hawser just the reverse of this, for my counter parbuckle, that is, I should wear it through the same port-holes from inboard outside, having the bight inside, instead of outside as was the case with the main Parbuckle, I now have only to pass the ends of this parbuckle over the head & heel of the shun leg (near the same place that the main was passed), and bring the ends in through two of the gun deck ports, or scuttle holes, and have a few turns on

that Deck to attends them Take in the slack of it as the shun leg comes up the side & all is ready for swaying on board. bring this Spaniard, & now man with the Luff Tackle fastened to the main Rumbuckle, slush the wonnen plank on the Gunwale, and walk the shun leg up it, observing to take it down inboard with the counter Rumbuckle,

When inboard let its head rest upon the Spar over the Taffrail, and its heel on the deck. only shifting the heel over the Capstern so that this side of the deck may be clear for the other shun leg which I would get on board precisely in the same manner.



Rig the Sheers.

Having both my shear legs on Board, I should commence rigging them, In the first place placing their heels a little in from the ships side in order to lengthen the shroud head lashing when passed then crop their heads at equal distances from their heels & pass the head lashing with riding turns. passed on the bights, cropped and the ends well secured,

The lashing itself to be well stretched before it is passed,

I should now lash on, plumb in the crotch of the Shears a stout three or four fold Block. for my main purchase with good sheaves, and strapped with a long and short leg, the short one to have an eye and thimble in its end, I pass the long leg over the shear head lashing, through the thimble in the short leg, and take two half hitches on to its own part and stop the ends back, I pass the long leg of my main purchase Block in this manner, in order that it may act as a preventer lashing for the shear heads. I then lash on

abaft, and just high enough above the main purchase Block to play clear of it, a strong two fold Block with good sheaves, for my smaller Purchase.

Those two Blocks being snugly rigged on I would next reeve the purchase falls, and taking the down Block of the Main one as far forward as possible, lash or toggle it to the Breast-hook, or Fore footings. passing the lashing around the Bridle Ports; I should now clove hitch two hawsers over the sheer heads, for forward and after guys, also have two others about one third the way down the sheer leg for belly guys, observing to have cleats nailed on the sheers, to prevent the hawsers from slipping further down.

I would next get Four good tacks on the hals of the sheers, two forward & two aft for hal tacks, also athwartship, or span tacks to each sheer leg from one to the other, to prevent the sheers from spreading and reeve the chain in the waterways. now have a girtline Block with a girtline rove to each sheer head, and the sheers are completely rigged and ready for elevating

The girtlines at the head of the sheer legs serve to brace the mast too with.

Elevate the Sheers.

I should now get on board two shors, made of thick oak planks, and long enough to ~~enough to~~ extend over three or four Beams, having sockets in them for the heels of the shears to set in, and eye Bolts to lash them to, I now spread the heels of the shears and place them in the shors & lash them temporarily to the eye Bolts, † and as an additional security pass a stout lashing around each heel and a toggle in the opposite Port. † I would now set the sheers in the wake of the shors, take my forward heel tackles aft. and bowse away on all the heel tacks and launch the shears as far aft over the Taffrail as I possibly could without tipping them, to increase their angle and thereby facilitate their rising. † but as the shears are now ready for elevating I take the forward head & Quarter forward and clap stout tackles on them, man them well & have hands to attend the after ones, and lead the fall of the main purchase through a stout snatch Block, take it aft to the capstain, ship & man the Bars and heave around and raise

the shears, hauling away on the forward guys at the same time, and taking off handsomely the after ones as the shears come up.

Transport and secure the Shears.

As soon as the shears are up, I should lash them permanently to the Bolts in the shoes, and cast off the Bulwark Lashing from them hulls to the Foggs on the Ports, and take the forward hull tacks to them heads, and with the Decks in the wake of the shoes, and with the guys & hull tacks transport the shears a little forward of the Partners of the mizen mast and rake them so that them heads may be plumb with the hole of the mast.

I would now secure my shears for getting in the Masts, by lashing them firmly to the Bulwarks as before and bowsing my athwartship or spun tackle well taught & snapping all parts together with the hook, and having taught & letting up all the guys and hull tacks, then come up with my Main purchase from forward and bring the Cable aft to get the mast in with.

B. Yes Sir, that will do. but how would you proceed in getting on Board your masts, & which mast would you first get on Board,

M. I would get my mizzen mast in first to avoid getting any shears down, and because the Ship has less breadth of Beam aft than Forward, which would cause the shear head Lashing to ~~stretch~~ slack and bring all the strain on the water ways in transporting the shears aft, were any of the other masts got in first,

B. Proceed now and state how you would get the Mizzen Mast on Board.

M. In the first place I should take the distance from the step of the mast to the Spar Deck of the Ship, and apply this distance on the mast from the heel up, a little above which will be the proper place for rigging on the garlands, then covering the mast with canvass in the wake of the garlands, I would Lash it on the forward part of the mast, having the Lashing of the strutcher rope, passed on the Bight and the ends dogged down the mast.

B. One moment Sir. Why do you Lash the garlands

on in this way. and what are it advantages.

M. Y: = [redacted] dont you perceive that by lashing the gailand on the forward part of the mast, it puts it in the right place, because the shrouds are rigged forward of the Pastens, and the advantage of it is the much greater facility with which the purchase may be put on and taken off the mast.

B. very well Sir. go on. with gitting in the Mizen mast

M. I would now launch my Mizen Mast and toss it along side, with the head aft. and when along side onhaul the Main purchase and toggle it to the gailand snatch the fall and lead it to the Capstern, man the Bars & heave round, having forces over the ships side to prevent chafing, when the head of the mast is a little above the gunwale, cease heaving for a moment and onhaul down the smaller shrouds such tackle as the Burtle lines &c. hook this purchase to a stout strap passed around the burtle lines, and away them up and at a fine hands jump up on the Hammock nettings to haul them over the mast head and settle them well in their places, observing to have them wiped dry and well whited backed in the mast head before they are put on. next for-

at

parcels and tar the Bolsters and place them on the [illegible] and lash them to [illegible] them and to the Rigging, then place over the mast-Pennants which are fitted with an eye former with two seizings connecting the forward & after legs, the long to be aft. now hook the Pennant-tackles, and make fast the canting gittins, just below the Bibb, and man them, now heave around again on the capstan and just before the heel of the mast gets above the gunwale clap on a heel tackle to ease it in with, heave around again on the capstan and ease the mast in handsomely with the heel tackle, sway on the canting gittins and place the mast in a vertical position over the Partners, and send the Carpenters Below to look out for the heel of the Mast as it comes down, and to give the stick & transom a good coat of white lead now lower away the mast, & stick it, and wedge it temporarily, and steady it with the Pennant-tackles,

B. Why do you bring the masts along side with their heels aft.

M. That Sir is to do away with the necessity of cant-

ing them, and perhaps by that means keeping the Shrs.

B. One more question Mr. Why do you prefer having the long legs of your mast-Pennants aft. instead of forward, & what good does the white lead do on the mast-in the case of Jury Masts, stays &c-

M. Because Sir if when engaged in action, by stress of weather, or any such accident-I should happ to get stays shot-or carried away, I could stay my masts temporarily with the Pennant-tackle, and have the blocks clear of the Gown yards in bracing up, and not bring the sheers upon the rigging, which would be the case if the long leg was forward. and the only object I can see in using the white lead is to keep the water out, and thus preserve the wood.

B. Very well Sir, as your Mizen mast is now stepped in its place what do you next to do.

M. I now untoggle the Main purchase and send a man aloft to cast off the Shrs head cantin girtline and Trenchant the sheers forward of the Main pendents for the Main mast.

B. What sized Spars should your sheer legs be.

M I should have the sheer legs about 2/3 of the length of the mast-I intend to get in.

Transport the Sheers.

In order to do this, I come up with my athwartship tackle, and cast off the Bulwark lashing, and man the main the forward guys and hal[illegible] clus, observing to have hawses to attend the after ones and cut the decks in the wake of the shors, and transport the Shears a little forward of the main Partners, and secure every thing as before for the purpose of getting in the main mast, which is done in the very same manner as I did the Mizzen, save only with the exception of using the smaller purchases in this instance, which I would have toggled to a garland a few feet above the main one:— I would now proceed to get in my Fore mast:—

F. A. This is done in the same manner as the Main you need not relate the particulars. How would you get in the Bowsprit?

VI. A. Soon as the Fore mast was stayed I should proceed to,

Get in the Bowsprit.

As the cave of the ships Bow will not admit of the shrouds going much further forward, I would advise them remain where they were in preference to having parting so short a distance, and take them over the Bows, so that the Main Purchase when hanging plumb would just clear the Cut-water, I would now secure them well in this raking position, take all my forward guys aft, and after bull tacks forward lead my after guys through a couple of stout Snatch Blocks, which I would have lashed to the Foremast-head one on each side, and set them well up abaft to the main Beam, or around two of the Spar Deck Ports. opposite the main Mast. now set up all the bull tacks alike and all the guys.

And as an additional security to the Fore mast-head pass the end of a stout hawser around it and set both parts up to the after part of the Fore chains,

The Foremast may also be secured by forward tacks hooked to the Forward part of the Fore chains

As soon as the Mast is thus properly secured trice up the lower Block of the preventer purchase

and Lash it well to the Fore Mast-head, Snatch the fall to a Block seized on to the Fore mast-head & lead the fall down on Deck and haul it well taught, to secure the Shrouds.

Get the Bowsprit in.

Loose the Bowsprit in the wake of the garlands with canvas and seize on the garlands so that the Bowsprit may hang a little but heavy, get the cap on and nail on the Shoulder cleats & saddle for the Jib Boom and then Launch the Bowsprit and tow it along side under the Bows, as soon as it is along side on haul down the main purchase & toggle it to the garlands & take the fall to the Capstan; Now haul a seizing Strap around the butt of the Bowsprit, and on haul down a tackle from the Gunwale between the Bowsprit bed & Bitts, or through the Hawse of the Bowsprit; and hook it to the strap on the butt of the Bowsprit. also have guys on tackles from the Bowsprit cap to each cat-head for the purpose of keeping the Bowsprit in its place when

lowering of it- aft, and stepping it. now heave round on the Capstern and when the Bowsprit is high enough rowse in on the hal and cap tacks, ease away on the Main punchan, and step the Bowsprit, observing to white lead the Bowsprit on its hul & between the Bits and to tallow the Bedway,

I would after this tow the Jib boom under the Bows, and toggle the punchan to a sliding sheaf pasted over it, and sway it on Board, and joint it through the cap on the end of the Bowsprit, and lash it temporarily, I would also get my Sops on board in the same manner, and after this having no longer any use for the shears I would dismantle them & launch them over board,

B. Why do you not get the Bowsprit in first Mr.

M. Because if my Bowsprit was got in first I should have nothing to support my Shrouds,

See page 16. In getting on board the Mast the Captain should never be hoyed because you may wish to heave around on one Capstain and not on the other.

Unrig the Sheers. & Launch them Overboard.

In order to do this, in the first place I cast off the Bulwark Shun leg, and Shor Lashings and take aft the after sail tacks, now come up with the athwartship, or Span tackle Lashing, and lown the Shuns down on the Night heads, by attending the guys easing away the forward sail tacks and rousing the sails aft with the after ones.

As soon as they are down & stick them and launch them aft in the gang way, (Lay on the Starb^d side, as this is the comfy alley side) and get them over board with the Pinnant tacks. thus.

I would secure my Masts with Runners and tackles & temporary Fore & aft stays, and set work with my Starb^d Pinnant tackles, now pass a stout strap around the head and heel of the Shun leg, & hook the Starb^d Fore & Main Pinnant tacks to them having a small tackle or whip purchase from the Fore & Main chains to rouse them out by. now take the Pinnant tacks and away them high enough to clear the hammock nettings, rouse out on the channel tackle, & lower away on the Pin

mast- tacks and bear them clear of the ships side as they go overboard, get the other leg out in the same manner, and tow them on Shore.

B. by gosh Mr. I declare to God you have overboard those things capitol chaps. me. but it makes me feel young again, it put me in mind of the time that I was a Midshipman on board the old when she went down in the Gulf of Mexico and nobody was saved out of 480 men but an old Quarter Master, what was his name. Commodore R. damn me if I dont forget it has been so long ago. Mr. yes Mr. Mr yes by God, it Mr something Mr Cabe, yes Lieut Mr Cabe that was the very lad, and a good man too he, but poor fellow he is gone now.

M. Gentlemen have you any further wish for my instruction.

B. Oh. yes. did any one ever hear the like. M. Sir. you have not commenced yet. let us hear how you would rig a Bowsprit.

Rig a Bowsprit.

In order to do which I would rig in stages under the Bowsprit for the men to stand on in lashing on the collars, straps &c.

I would begin rigging the Bowsprit by cutting on the strap and heart for the Fore stay, two thirds of the way out from the knight heads, next to this the strap and heart for the heart underneath the lashing on top. Bobstay; Then the collar for the inner Bowsprit shrouds, fitted with two dead eyes turned in; one on each side of the Bowsprit, the lashing on top. Then once the diameter of the Bowsprit farther out cut on the strap and heart for the Fore Spring stay, and next to this the strap and heart for the middle Bobstay, then the strap and dead eyes for the outer Bowsprit shrouds, and last (not least) the strap and heart for the cap Bobstay, close out by the cap between it and the Bee.

Note. The heel strap for the Jib Boom should be put on the Bowsprit close out & inside the collar of the Fore stay, and the strap for the bolt lashing of the Jib boom should be put on close out side the strap of the outer Bowsprit shrouds next to which should be the strap for the Spritsail Yard.

I would now clear my Bobstays through their respective holes in the cutwater, having them feathered in its wake, bring their two ends together and splice them with a short splice, turn hearts or dead eyes in the bights with a square rigging, and reeve the

Langards and set them up. 53 sec. next question.
next — hook the Bowsprit shrouds into their respective
bolts in the Bends, turn dead eyes in their ends;
veer the Langards and set them up. in the same
manner as the Bobstays. This is done to assist in
bring the Bowsprit down snugly in its place for
& also to support the Bowsprit from springing or rising up in the centre.
gammoning, as soon as 2 shall have set up the
Bowsprit Shrouds & Bobstays, 2 would prepare for
Gammoning the Bowsprit.

B. Before you commence to gammon the Bowsprit
you will inform us in what manner you set up your
Bobstays and Bowsprit Shrouds.

M. 2 should set them up a Luff upon Luff.
2. E. Hook the double Block of a tackle to the
Langard, & the single Block to a selvigee strap
passed around the shroud, or both parts of the
Bobstay, reach the fall in board, and clap a
jigger on it and get a good pull.

B. Is there any particular way of turning the heart
into the Bowsprit shrouds.

M. 2 should not make use of hearts for the
shrouds, but dead eyes, but which can 2 make
use, in times of peace & plenty. 2 should have

them in with an eye splice for mastings sake, but in times of war, with a ~~[illegible]~~ thrust at each seizing.

B. But why do you use clinch eyes in this instance instead of hearts, do you not seize hearts in the Bobstays

M. A heart is preferable to a clinch eye in the end of the Bobstays, on account of its admitting of more turns with the lanyard, a Dead eye has only three holes in it for the lanyard to run through whereas a heart is commonly marked with four or five sheaves, and on the contrary a clinch eye bolt is in the end of a chain, & is in all cases sufficiently strong.

Note The Bowsprit is rigged first because the Fore mast is stayed by it.

Gammoning the Bowsprit.

In the first place I would rig a stage under the Bowsprit, by running a couple of spars out each Bridal Port, and hanging them to the Bowsprit end. I would also put a stout tackle on the Bowsprit end and suspend by it some heavy weight, say for instance a large cask of water. In order to bring the Bowsprit more easily in its bed for gammoning,

I would then tar, parcel, and leather the Bowsprit in the wake of the gammoning, having the leather of sufficient width, to cover the gammoning when passed. I should also have the gammoning scuttle well tarred.

I would now commence, by passing the first turn with a running eye, around the Bowsprit square with the after part of the gammoning hole then down (on the Starboard Side) through the gammoning scuttle and up (on the Larboard Side) over the Bowsprit.

Now in order to set up the gammoning (as we push in long, push moving,) I should lay a stout selvagee block over the Bowsprit, pass a bight through the other, and take it down

the Cat-water, and bring it up on the opposite side (i.e.) and hook a snatch Block in this bight- (observing to have the strap of such a length as to bring this snatch block in a line with the hawse hole,)

Snatch the gammoning to this Block and lead the end through the hawse hole; and set it up on the Gun deck with luff upon luff, as taught as it will bear, rack it well, come up and so proceed having taught each turn separately, and rack it well before coming up, in order to prevent the gammoning from unreeving,

The best method of racking is by driving wedges into the gammoning schuttle.

After passing as many turns as will run through the gammoning schuttle, which is generally from seven to eight, cap the end up between the gammoning turns & the Bowsprit, now on hand down one of the Fore pennant-tackles, hook the down block to an euck well hitch in the end of the gammoning, and secure the end by jambing it well up between the gammoning turns and the Bowsprit.

Now take a smaller piece of stuff (say about

three of three quarters or four inch rope), for frapping, and passed on the right-
hand bower cring turn well taught by a tackle from the Bitt Pins.
or cat-heads
take 8 or 10. turns and secure the ends of the frapping.

Note sometimes a cross frapping is used, but this is not always necessary.)

As soon as the gammoning is thus properly secured haul on the tackle, and tack it down and paint it, and it is done.

In the same manner I should set up the next gammoning, only observing to set it up on the other side (i.e.) in order to keep the Bowsprit from inclining on either side.

The gammoning should always be of hawser laid rope, well tarred and stretched, in order to render it more impervious to water, and the gammoning turns should be passed from in, outwards, the inner gammoning to be passed with the sun from Starboard to Port, under the outer gammoning, against the sun from Port to Starboard.

As soon as I have done this much for my worst little Bowsprit, I should brown down the right which is destined to the Bowsprit cap

and sway up one side by the dolphin striker, reeve on the fair leaches for the martingale stays, to reeve through; fit the gobbins to the head of the dolphin striker, and reeve them through the fair leaches, and set them up. at the same time setting up the Bobstays & Bowsprit shrouds for a fresh start, next hook the main rope to the eye bolts in the after part of the Bowsprit cap one on each side, reeve them through stanchions at the Knight heads, and set them up in board, then fit a double block on each side of the Bowsprit

for the Fore & Fore Top Bowlins to reeve through, and after this unrig the stays & cast off all the straps & tacks used in the above discribed shocking operation, and proceed forthwith to fit the Fore mast to your damnable infernal lubber

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By opening to page 27, any one who looks can see a figure, altho not very accurate, bears some resemblance to the sun, which although it is the brightest thing in the universe, is never the less not without its spots

although that is without the best way of setting the gammoning in consequence of its affecting

at the same time to bring the Bowsprit down into its
gut it is evident that this method cannot always be
practiced, for instance, if the gammoning ugly
sitting up at the, a strap could not be got
around the Bowsprit in this manner in consequence
of the Heads being on. and bowsed up;=

In this case I would take one end of
a stout strap through the hawse hole on the
same Bowle it inboard, then bring the other end
round on the side under the Cutwater and
hook a snatch in its bight in a line with the hawse
hole, and haul the gammoning through this block
and through the hawse hole and set it up on
the gun deck with a luff upon luff in the same
manner as before,

After having taken four or five turns around
the Bowsprit with the gammoning the end will begin
to grow short, and it may or not reach in thro
hawse hole, to get a purchase on it on the Gun deck
In this case I would have a pennant with a
running eye in one end & a thimble in the other,
make fast the end of the gammoning to this running
eye with a Rolling hitch, & take other end with

the thimble in it through the hawse hole, and hook the tackle in it and so proceed to set up the gamming

Rig the Foremast.

5

Although I have already gotten on all the Masts the Burgatte Irons, Bobstays, and Pennants, yet for the sake of greater consciousness. I will in this instance suppose that I have only the naked Mast which I have to get every thing on and fully Rig.

I would stay the mast forward for rigging with runners & tackles, next get a temporary stirrup and man rope at the mast heads for the men who are to place the rigging on, to stand in it. to hold on by. I should then send up my Burgatte Irons, & Bobstays to do which see.

I then make fast to the after part of the Top the two gantlines to assist in hoisting up the rigging above, and also have an eye gantline which should be soon strung a tail block made

made fast in such a manner to the transom of the mast head as to allow the chuk of the ~~block of the~~ block to lay against the after part of the square of the mast head, having both parts to work with.

Now take the bolsters ~~in the wake of~~ and the mast head in the wake of the rigging and send up the town Pennants and fit them on the mast head, and mast them well down in their places,

I would now man haul down the ~~st~~ Starboard gittins from the Jeopette thus for the starboard forward pair of shrouds, in which, while on each I would from the eye of the rigging, previously to its being sent up, and tally it with an odd number I. E. I would tally all the starboard shrouds with odd numbers commencing at one, and the Larboard shrouds with town numbers commencing with two,

The seizing of the 1st pair of shrouds to be placed towards the eye up, and all the others down with no other allowance,

I now middle the gittins and turn a toggle into it, having one part to man haul down

by. now clap a seizing on the shroud far enough below the eye to allow it to go over the mast-head tuyse the gintline to the shroud and overhaul down the eye gintline from the mast-head & unreeve it on to the shroud at the eye seizing and stop it along the crown of the rigging; in other words the eye of the shroud,

Now away upon both gintlines and when the eye comes up to the gintline blocks on the bows of the Jupitte trus, cut the stops, and away away upon the eye gintline untill the eye seizing is up to the Block.

Now take a small rope for a brake rope make one end fast on the opposite side of the mast-head and run the other end through the eye of the shroud and pass it down again to the men on that side, of the Jupitte trus. cast off, and clap the gintlines, and break the eye over the mast-head, place it upon the right-shoulder & let the men on the Jupitte trus, mount it down all in its place, observing to be particular in keeping the shroud upon the right-shoulder and preventing the seizings from overlaying

each other, Note, before mauling it down ensure the Break rope,

Now on haul down again the eye girtline & Larboard Top sail the girtlines for the Larboard fore & aft Shrouds, which sway up and place over the mast-head in a similar manner, & so on until all are rove, first a Starboard & then a Larboard pair alternately, mauling the eyes well down, and placing them in such a manner that the eye ropes may be clear one abaft the other;

Now shift the girtlines from the after bows of the cross trees to the forward ones and overhaul them down for the Fore Stay; which should be fitted with Looking eyes, (All Stay tackles should be fitted in this way on account of the facility with which it can be got up & down,) Reeve the Larboard Lanyard to one eye and ready for passing, bend the girtlines on at the Splice in the collar and pass them along each leg, when ready, sway away, and bear the legs around the mast-head and Lash them abaft, over cast of the girtline and overhaul it down for the Fore Spring Stay which sway up & Lash in the same manner.

Now turn clear eyes into the lower ends of the Shrouds, over the Langards and set them up a starboard & a Larboard pair at the same time being particular to see that the clear eyes of the lower rigging is properly squared, and that the Langard is now so that the Rest will be against the end part of the shrouds, as soon as those shrouds are well set up. Loosen the wedges of the Mast and set up the Fore Stays with luff and Tackles, after which wedge the Mast for a full due.

B. Would you rig your lower Masts with your Jops on, or off.

M. I would consider it most undesirable to rig the Lower Masts with the Jops off. but in very cold weather I might have the Jops on so as to enable the men to work with greater security to them selves, and have more hands aloft to assist in clearing the rigging over the Mast heads.

F. How would you turn in a clear eye or heart for the Stays &c.

M. A dead eye should always be turned in with the lay of the rope, That is for the Down Shrouds which are generally wain laid rope from the to the the dum the ends always to lay inside, clap on throat, Quarter, inner riggings, and cap the end of the shroud, or stay with a small piece of canvas. A heart for the Stays &c. should be turned in the same way having the end part inside, & with throat quarter & inner riggings.

In reeving the Lanyard through the dead eye of the Down or Top mast rigging, observe to have the knot on the end part of the shroud, so as to bring the strain on the standing part, and not endanger the throat rigging when it is set up.

B. How would you set up your Down Rigging

M. Lets see = The Shrouds should be set up with a pennant and luff tackle,

Send aloft the Trusstle-Trees.

Lash on each side of the mast-head a gantline Block, for getting the Trusstle trees up with; reeve the gantlins once or twice & haul them down on deck. now take the Trusstle trees; and knock out the aftm chocks; and steer them up against the Forward part of the Mast with the aftm horns up: = Bind on the gantlins to the middle part of the Trusstle trees & stop their bights out to the after horns, have a guy from forward and away up, attending the guy, when high enough cut the stops and land them on the Bibbs, observing to put some white lead in their wake upon the mast and Bibbs, ship and bolt the chocks. and over haul down the gantlins and prepare to send up the Lower rig = ging. another method of doing which is.

To the Fore Mast.

~~Reeve the gantlins~~ In addition to the gantlins

which I have on each side of the mast-head for the purpose of sending up the Fore & Aft Sails, I would make fast two other gratings Block. on each side of the mast-head five or six feet below these, those gratlines, one hauling them down on each; and send up the Bolsters, which tar & down to the Fore & Aft Sails and mark them with to the Fore & Aft Sails and to each other, give the mast-head a good lick of tar in the wake of the eyes of the rigging.

Now then;= The rigging being along side and numbered, (that is; with a yarn having an odd number of knots on the Starb^d shrouds and even numbers on the Larb^d commencing at the Whip the rigging in board and place it in the gang ways.

Next away up the Pennants and put them on the mast-head, then toggle the upper gratlines a few feet below the eye rigging and stop it to the eye, then bend on the lower gratlines or twelve feet below this, and stop it to the right of the shroud a little below, now man both gratlines and away up the Starboard Forward pair of shrouds first, and when high enough

set the steps, and with a bricole rope brake the eye over the mast-head, clap the upper gantline and suspend the rigging by the lower gantline have hands on the Jeugatte trus to mast it-self down in its place, and keep the eye on the right-lead, and prevent the seizings from one lazing each other; next send up a Larboard pair of shrouds in a similar manner, and so proceed until all the rigging is over, when set up the shrouds with a pennant & cuff tackle;=

The rigging should be set up in pairs a Starb^d & a Larb^d pr^s of shrouds at the same time and care should be taken in reeving the lanyard through the cleat eyes, that the knot part of the lanyard are be on the end part of the shroud as to bring the strain on the standing part of the shroud. not to endanger the throat seizing. #

As soon as the shrouds are set up in this way, I should nail cleats on the mast-head a little above the lower rigging for the collars of the Fore & Fore Spring stays to set on until the eyes of the lower riggings gets well settled down:= Sway up and cash the collars of the Fore & Fore Spring stays above the wedges of the Fore mast and set up the

stays, with the Pennant and luff tackle by carrying the Pennant-tackle forward & hooking it into a strap passed around the mast-head. Next reeve on to the fore mast just above where the catharpin leys come, a strop & thimble for the main Top mast spring stay to set up to; the strop & heart for the proper main Top mast stay is lashed on above the eyes of the lower rigging, and the stay sits up on deck: =

It would be well to set up each pr of shrouds as soon as they are got over the mast head, in order to get them well settled down in their places.

Recollect to worm, parcel, and Mark the eyes of Both the rigging as far down as a foot or two below eye seizings,

The eyes of the first pair of shrouds should be five square of the mast head, and the seizing of the Second pair of Shrouds should be one diameter of the shroud [which is, or rather ought to be equal to the width of any one of all the seizings] below the seizing of the First pair, so as not to soon lay or chafe each other seizings, and in like manner, make this allowance for all the other shrouds.

Getting the Tops over.

Having already rashed two good stout-
gantline Blocks to the mast-head; Reev one
haul down the gantlins and bind up & bolt-
Rud putting a quantity of white lead on them in the
wake of the Trusstletrees; = The top being now along
side, away it- on board and place it- abaft- the
mast- with the Forward part- uppermost; = now
pass the gantline under the Forward part of the
~~Head~~ Top, then up again through the gantline hole,
and down through the lubbers hole; and stop the
ends out- to the sides of the Top, and pass both
parts together at the Pigeon hole, and also at
the upper part- of the Top. have a guy from the
main mast- head made fast- to a span at the after
part- of the Top, and stopped to the Forward part-
now. Then my Lads we will away away, taking in
the slack of the guy, so as to keep the Top clear
of the Trusstletrees, when high enough, cut the stops,
and let the Top fall over the mast-
head, when down away, place it- fair and bed it-

toggle it to the Cross Trees.

The same gittines will do for getting the Lower Cap into the Top, which when landed should be placed in the Forward part of the Top so as to point the Top mast through it for fitting it on the mast head, also sway up and ship the Top Stanchions and Rails, and send up the chain eyes for the Top mast rigging; I would also send into the Top with the two gittines, Top mast & Fid, & Top Blocks, & Cap Show, after which take off the gittines, haize on the Sheer pole and * Futtock Staff and Span and Rattle down the Lower rigging; = Swifter in and haize on the Catharpin legs, and hook and haize on the Futtock Shrouds.

* The Futtock staff should be always scathed

Catharpin in the Rigging

As a general rule for the proper place to seize on the Futtock Stave, take one half the Offin part of the Top, which distance set off from the aftn part of the crosstree trus down the mast abreast of which in the rigging will be the proper place to seize on the Futtock staff, which I would seize on outside, athwart the rigging leaving out the Forward and Offin Shroud, & now to commence in the rigging for Catharpin Bar a seizing just below the Futtock staff and make fast to it tail blocks between each shroud, now middle & fall and commence reeving amidships, through the tail blocks, having one end to lead forward and the other aft the parts crossing each other from Port to Port and from Port to Starboard, snatch the ends of the falls on Deck and with this purchase house the rigging in sufficiently to seize on the Catharpin legs; which must be already wormed parcelled and leathered, with an eye in each end a long and ready for seizing on

They are rigged in to each shroud in the wake of the Fattock staff, observing to leave out the Forwarer and After pair of shrouds.

The Forwarer shroud is left out so that the yards may be braced up sharp, and the other ones are left out to serve as back stays;=

Sometimes in small ships there are cross cat-harpins which go from the Starboard after shroud to the Starboard Forwarer one, and vice, versa. Wiley worey.

As soon as the cat harpins legs are rigged on, unreeve the falls, cast off the capstan Bars and tail blocks, and send them down, and send up

Fattock. Shroods.

having them fitted with a hook in one end and an eye & thimble, with a lanyard secured to the thimble ready for lashing, hook them to the Fattock plates under the Top and set them up around the shrouds in the wake of the Fattock staff, after this rattle down the rigging and prepare to get the Topmast on by and pointers;

Rig the Main and Mizen mast in

in a similar manner; The Main stay sets up on the Starboard side of the Forecastle, and the Spring stay on the Larboard;

The Mizen stay sets up with two legs around the Main Mast - one on each side to eye bolts in the Deck.

From Page 47. continued

a bulls eye which is hooked to an eye bolt in the Bows inside the head,

In the same way runs the Martingale stay on the other side, and fit the Gob-lins, have a Matthews Walkers knot formed on one end, runs the Gob-lins thro the lower part of the middle shorn hole in the Martin-gale leg from out, in, and thro the middle thimble in the fair leader, and set the end up to a thimble in the bight of a strap around the Bowsprit inside of the head, = Reeve the one on the opposite side in the same way, Seize on the fish guys close out a small double block on each side for the Fore-top-gallant & Fore Royal Boulins to runs thro & seize on to the travellers the blocks for the fish braids and down haul

Get the Jib Boom out & Rig it.

I should now get the Jib Boom on board with the Fore and Main Pennant tackles, and haul it out on the Bowsprit through the heart straps of the head stays, = Then hook a double Block to a good strap passed around the body of the Bowsprit Cap, and reeve a hawser rope through this Block and through the sheave hole in the heel of the Jib boom, taking two half hitches with the end to one of the eye bolts on the Bowsprit Cap and stop the end back.

Now cross lift the head of the Jib Boom with a couple of heavers; to assist it in entering the Bowsprit Cap. and rig it far enough out, through the Cap, for putting on the rigging.

First put on the Bowlines, and then the foot ropes, which go with a round turn and two quarter turnings; = Next the Guys which go with an eye turning, first the Starb'd and then the Larb'd pair; = And Lastly the Martingale stay Blocks which are single and go separately with an eye over the Jib boom end.

Ship the withe for the flying Jib Boom, & reeve the Jib Stays through the traveller and in one sheave hole in the end of the Jib Boom; = Set up the foot ropes to eye bolts in the upper part of the Bow-sprit Cap; =

Now rig the boom out and place the hut straps; = the hut straps or hut lashing of the Jib boom, should be the same size as the Jib stays and fifteen long enough to go double around the Bow-sprit, and lash nearly eye & eye on the top of the boom, having cleats on the hut of the Jib boom to keep it from slipping; = (The hut does rest upon a saddle on the Bows prit.) Lay the lashing, reeve the hut rope & unhook the Blocks & reeve them in &c. &c.

Reeve the Martingale stay as follows have an eye splice in one end, knock out the middle sheave in the Martingale leg, place the eye around the sheave, put it back in its place again and drive the pin throught it as before, next reeve the martingale stay up through the Blocks at the Jib = boom = end then down thro' the upper sheave in the Martingale leg and lastly thro' the upper thimble in the fair leader on the Bow sprit & set the end up to its own part thro' a =

See page 45.

Bullo

Get the Topmast on End

If the lown cap was not on the Top. 2 would bend on a gin-line to it & the cap down and away them aloft and place the cap with its round hole, over the Top mast hole in the Trafftle-trees, fair for swaying up the Top mast.

Now send up a stout single Block & lash it well to the lown Mast-Head as high above the eyes of the lown rigging as practicable observing to put canvas on the mast head in the wake of the lashing, Reeve a stout hawser through this Block and lead it down on Deck out-side of the Top.

The Top mast having been already launched and brought along side, Run haul down one end of the hawser out-side of the Ship and reeve it through the shun hole in the hul of the mast and hitch the end around the Top mast-head, also clap on some good stops around both parts of the hawser and Top mast about the length of its Mast-head below the hounds, and take a good

good piece of stuff and rack both parts of the hawser together about half mast up: = Snatch the other end of the hawser inboard & lead it to the Capstan: =

Bend on a good hawl rope to the Top= mast and lead it through one of the Gun Deck Ports to ease the Mast in board with. also have a stout guy on the Fore top mast head to leading forward; to guy it clear and forward of the Fore Top. have fenders over the Ships side to pre= vent chafe, and when ready, Man the Bars & heave round, attend the guy & hawl rope; guy the mast clear of the Top, & ease the hawl in board with the hawl rope, and lower it down the Scuttle: =

Now enter its head under the collars of the Fore Stays, heave around again on the Capstan and point the Top mast through the top mast= hole in the Trusstle Trus, and Lower Cap, avast heaving for a moment and Lash the Cap well to the Top mast head, and take a Spare span for steering the mast as it becomes necessary, in shipping the Cap, and put three ropes on each end, or else take a round turn with a Selvagee Strap through

the fid hole and drive it to Starb.d or Port with the Pennant-Tackle; -

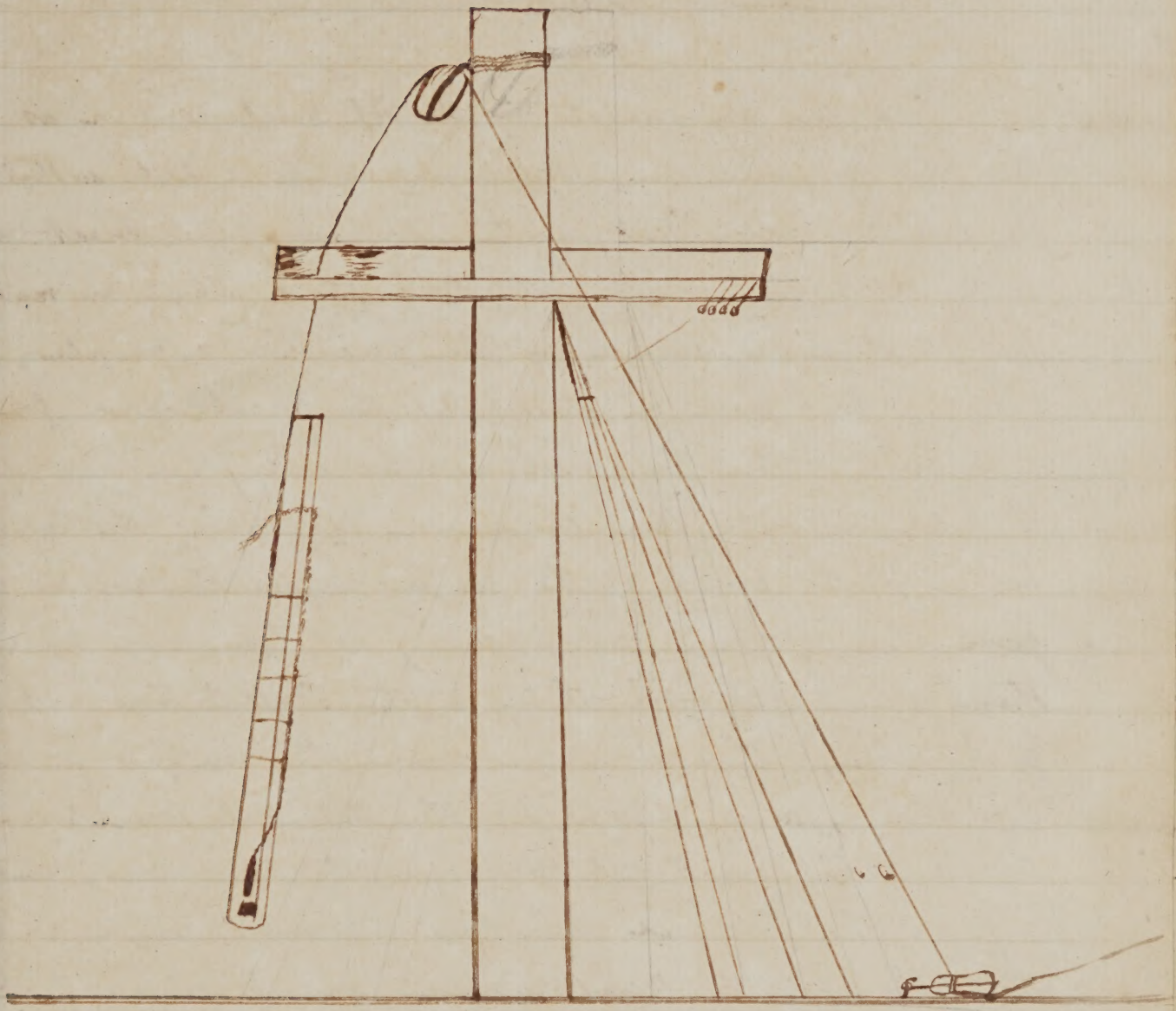
Now sway away again; and when high enough place the square hole of of the Cap, over the Lower Mast-head, observing to have it well white leaded in the wake of the trunnion, Ship the cap shore, and mark the Cap well down in its place, and tack shut leaded over the head of the Mast to keep water out.

I would now hang the Mast by the Pennant Tackle, come up with the hawser, unlash the Top Block, and hook it to the After quarter eye Bolt in the Lower Cap; = Cast off the stops & Racking of the hawser and make the end fast to the Forward eye bolt in the Lower Cap: Heave round again & sway the Top mast up until it is nearly its Mast-head above the Lower Cap. Then lash a couple of Single Blocks to the Top Mast-head, reeve gintlins through them and over haul them down forward of the Top, for the Top Mast-Cross Trees, bind them on to the Forward part of the Cross Trees sway up, and Lash the after part of the Cross Trees on the Lower Cap & Lash them to the eye bolts, the Forward horns resting against the Topmast

Settle the Top Mast and let the cross trus lay on the head of the Mast. # having previously cast off the gitting blocks from the Top mast head and made them fast to the horns of the cross trus on each side, and white leaded them in the wake of the Mast head. (# preparatory to getting the Top mast rigging on)

Now sway the Mast high enough for the Cross trus to lodge on the shoulders of the Top-Mast, unhook the Pinnant tackle, take the sway-ye attap, or capstan bar from out the Fid hole and sway up and fid the Mast, and make ready for receiving the Rigging, and rig the Top mast immediately if not sooner.

It would be best to have hances to place the cross trus on the Top mast head. and the Top mast should be partially rigged before it is fidded. (see (page) 53.



Rig the Topmast

I would commence to rig the Top mast as soon as the Cross Trus were on, by swaying it up a little so that the cross Trus could rest on the Shoulders of the Mast. & bend the rigging aloft with the gantlines which are made fast to them as stated in the preceding example.

Now have a stirrup at the Mast-head for a man to stand in, and a rope end for a man rope to hold on by. Then commence by tarring the Mast head in the wake of the rigging, give the Bolsters a good lick of tar, just parcelling on them and bend them up and mark stop them to the Trus & the Trus and to each other, then overhaul down the gantlines for the Gin slings, and straps for the Topsail Buntline Blocks, which are Fiddle Blocks; = the upper sheave answering for the Topsail Buntline to reeve through, and the lower for the Bunt-runner, and occasionally at sea to reeve spilling lines through, the Bunt-runner being unreeved; = The Gin slings, & Buntline Blocks straps are usually spanned together, and on each side of the Mast-head, and

when this is not the case the Gin slings hang by a chain covered with leather :- Now haul down the girtlines again, for the Burton Pennants: which shou go with a cut-splice & an eye, and thimble in each end, bend on away up, and place them well down over the mast-head :- Now if we are proper, heave up, and fid the Topmast and support it with the Burtons, come up, and cast off the hawser, and unhook the Top Block, and send it down :- But I think it best, and much more expeditious & safe to rush all fast, and get all the rigging over the mast-head before fidding it :- Therefore I shall proceed, and next haul down the Starb^d girtline for the Starboard Forward pair of Shrouds which bend on; away up, and place over the mast-head in the same way that the Crown rigging was; and so on with the rest of the Shrouds, Starb^d and Larboard alternately, until all are over :- Then send up the Breast and Standing Backstays, observing to haul them well down in their places over the mast-head; - * The Breast Backstays are put over first, so that in coming up with the lee Breast-Backstays, the Standing will keep them

The Breast Backstays often go with a Lashing eye so that they may be taken off & put to rights

seize them down in their places, and prevent chafing.

Now away up the Fore Top mast Spring Stay, and lash the collar up above the eyes of the rigging, having cleats to prevent it from slipping down, then away up the Top mast Stay, and lash the collar up above the collar of the Spring Stay, and last of all bend up the Jib Stay, which nearly always has an eye splice in its upper end, this is dipped thro' the Topmast Stay collar and lashed securely to the collar of the Spring Stay;=

Reeve the Fore Top mast Stay through the outer shave hole in the Bees on the Starboard side of the Bowsprit, and the Spring Stay thro' the inner shave hole on the Larboard side of the Bowsprit, turn hearts, or dead eyes into their ends over the Lanyards, and set them up to other hearts or dead eyes, in the Bows, inside the head, and stay the Top mast forward for setting up the rigging, sometimes the Top mast & Spring Stays leads through an eye bolt & thimble inside of the head and sets up to its own part just on a Throat, gunwale, or seizing, and this is by far the neatest way, & equally as good in these piping times of peace, & more than [illegible] in the work of the eye bolt & thimble, pour *

Now square the dead eyes ends ends of the Top mast shrouds and commence setting up the Top mast rigging with a Top Runner & Burton, in the same way as the lower rigging is set up. (i.e.) a Starb^{d} and a Larb^{d} p^{r} of shrouds at the same time, only observing to keep beating the Top well down in the wake of the Futtock plates, with a Top Maul, while setting them up, after setting them up secure the ends of the Lanyards, and unhook the Burtons:

Turn double Blocks into the ends of the Boat Backstays and set them up to other double Blocks in the Fore channels. also turn dead eyes into the ends of the standing back stays, run the lanyards and set them up to other dead eyes in the channels & with a luff upon luff.

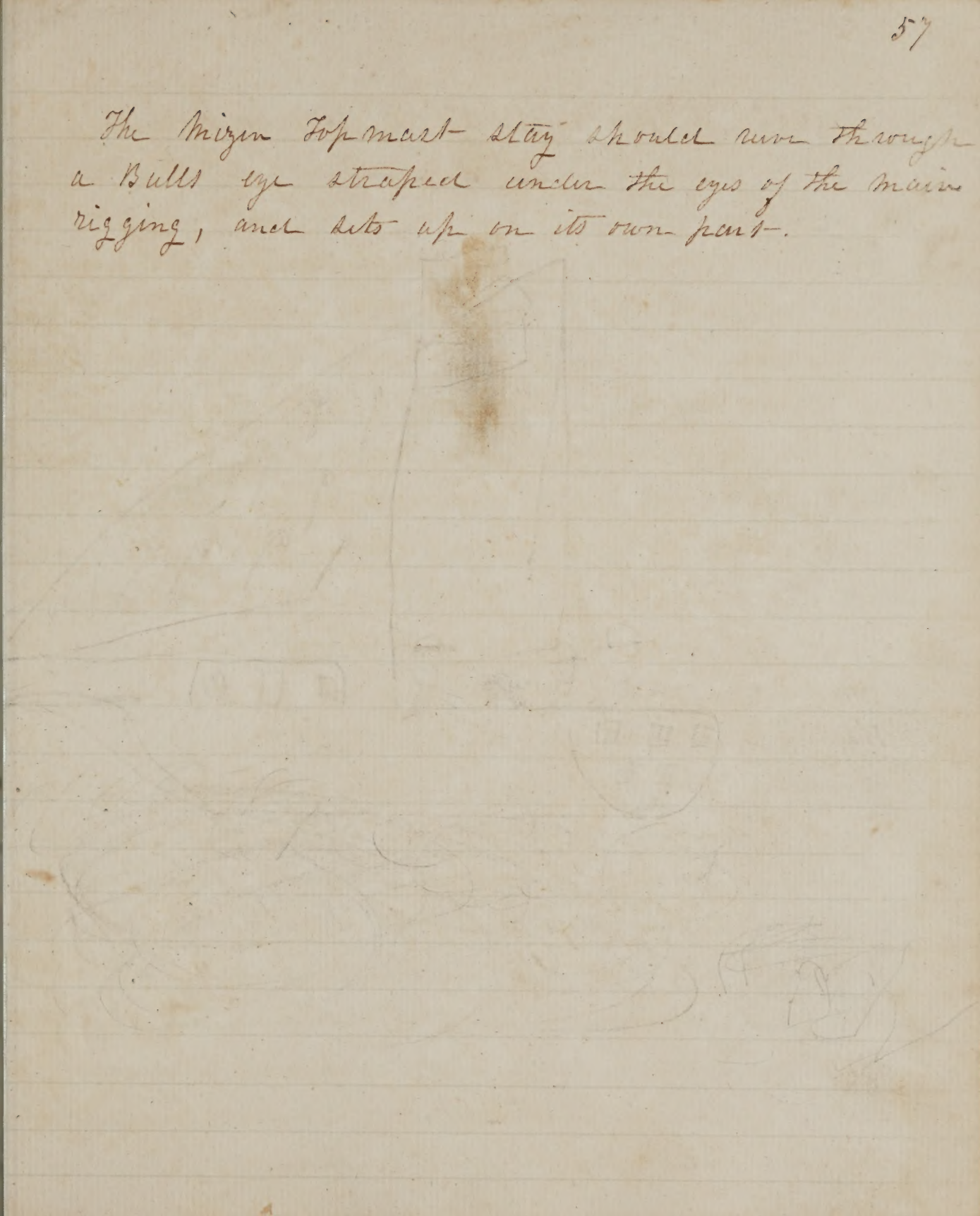
After thus setting up the rigging, come up with the Topmast stays, and place their collars down over the eyes of the rigging so as to clear the Top Gallant sticks, and set them up for a full due, then come up with the lanyards of the Topmast rigging, again, square the dead eyes, and give it the <u>second</u> setting up:= after which seize on the shun pole, and span & rattle down the rigging, put leather on the

Topmast- Tattock staff and seize it- on inside of the topmast- rigging, Swifter in the rigging with a couple of small riggins and seize on the Catharpin legs. in doing which, take the distance from the end of the after crosstree to the Trusette Irons and with this distance measure from the upper part- of the Trusette Irons down the mast- at right- angles with which in the rigging, will be the place to seize on the Cat-harpin legs. Their lights going around the Topmast-, so that- both ends of the Starboard Catharpin legs is made fast- to the Starb.d Topmast- shrouds in the wake of the Tattock staff, and the same way with the Starb.d one. proceed in a similar manner to rig the Main & Mizen Topmast.

A Sister Block is fitted between each forward pair of Shrouds for the Top sail lifts & Buff tackle pennants to run through;

The Main Top Mast- Stay should run through a stout- single Block strapped around the Fore Mast- head just above the eyes of the Lower rigging, and set up to its own part- through another single Block or Bulls eye on deck, immediately abaft- the Fore mast-

The Mizzen Top mast stay should run through a Bulls eye strapped under the eyes of the main rigging, and sets up on its own part.



Get Top=Gallant Mast on End.

Imprimis; one haul down a gantline for the Top=Mast Cap & Cap=shoe, which bend on, away up, and place the Cap on the Top mast-crop trus, with its round hole directly over the hole through which the Top Gallant-Mast goes: Now lash a stout block to the Top mast head through which run the long top Gallant-Mast rope, one haul down the Mast rope and run the end through the shoe hole in the butt of the Top Gallant-Mast, bring it up and hitch it around the mast-head, reserving end enough for bending it to the Top mast head after the Top Gallant-Mast is pointed through the Mast hole, rack the standing, & running parts together, and clap stops along the Royal and Sky sail Masts:= Man the Jack rope, and away aloft, cut the stops as the Sky sail & Royal Masts, comes through the Mast-hole in the crop trus, and as soon as the Cap lodges on the shoulders of the Top Gallant-Mast= lash it securely and catch a turn with the Mast rope:= Now cast off the upper end of the Mast-rope, and hitch it around

the Topmast-head, cut the racking and sway away again till high enough for shiping the cap, white lead the Inmon of the Top mast-head, and ship the cap, put the shoe under, and haul the cap down in its place and put shut lead over the Top Mast head to keep the water out. &c. &c.

Rig the Top Gallant Mast.

To rig the Mast Down away the Mast ~~the~~ until the Sky sail Mast-head is a few fut above the Top Mast-cap, and then belay it; hook a small Block to one of the eye bolts in the Top mast cap, rove a gintline through it, and over haul it down for the Cillender & Jack, which should have the Top Gallant rigging fitted to it before it is sent aloft. bend on about six fut below the cilender, and stop the gintline to the cillender, & Jack. sway up and place them fair over the Skysail Mast-head, allowing them to rest on the Top mast-cap, haul up the ends of the Top Gallant rigging and rove them through the horns of the cross trus, then inside of the futtock staff and Top mast-rigging and down in the Top: = The cillender should

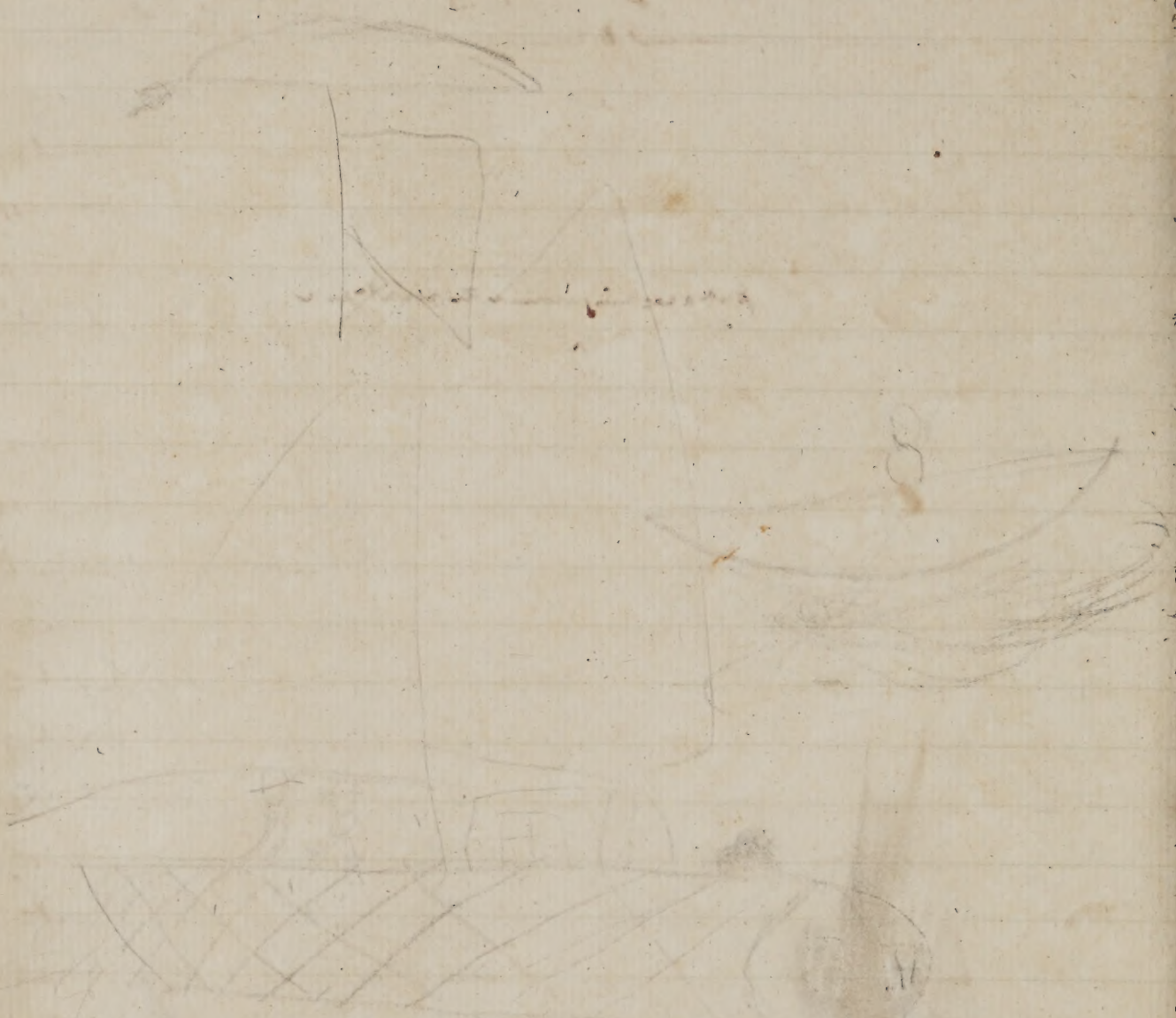
be rigged by first- placing one it- the Flying Jib stays then the Top Gallant- shrouds, Starb.d & Larb.d alternately, & then the Breast- and standing Backstays.

Next- away up the Royal & Jib of Jib- stays Royal Shrouds, and Breast- & standing Backstays, Then if we have any Sky sail mast- the Sky sail stay and shrouds, next- run the Pennant- halyards through the Truck, and send it- up and ship it together with the Spindle & conductor and then you may sway up & fix the Top Gallant- Mast- as soon as you like, observing to paint- the mast Heads and place the rigging fair as the Mast goes up: having previously given it- a good lick of tar in the wake of the Cillender & Royal & Sky sail rigging. The Main & Mizen Top Gallant- Masts are rigged the same way.

Note. Perhaps it- may not- be amiss to give another method of getting in the Top Gallant- Mast & rigging them which perhaps may not- only shed some light- on such things as appear obscure or complicated to the speculating imaginations of all studious Youths preparing for their examination, but- also on account of the short & concise manner in which it- of planned would be the best- answer to make before the Intelligent- Board

Send up & Rig Top-gallant Masts.

Tow the Top Gallant-Masts along side, run hand down the mast rope & run it thro the shave hole in the hul of the Top Gallt Mast. & stop it around the royal mast-head reserving end enough to make fast- on the eye bolt of the Top Mast- cap, put a seizing around the mast & rack both parts of the mast-rope to-gether about the Top Gallant & Royal Mast-head, and have a guy on the hul of the mast- to cant it in board with; Man the guy rope and away aloft-, bear it clear of the ships side, & cant it inboard with the hul rope; entir the sky sail mast thro the Top mast-cap, Cillendar, & Royal & ~~Top Gallt~~ sky sail rigging, all of which should have been previously put over the Top Gallt Mast hole in the Top Mast-cap. Cast off the Mast-head stop, & hitch the end of the mast-rope to the Forward eye bolt in the Top Mast- cap, Ship the Truck, Spindle, and conductor, cast off the seizings, and away thro, place the sky sail & Royal rigging fair, and paint the mast-heads as they go up. Run the ends of the Royal rigging thro the horns of the Jack cross Trees, place the Cillender & Jack firmly on the hounds of the Top Gallant-Mast- & away up & fid the Top Gallt Masts, cast off & unreeve the long Mast-rope & reeve the short-Mast-Pendant, which keep always rove at deck, ready for striking the Top Gallt Mast- in case of heavy weather.



Get out & Rig the Sprit-Sail-Yard

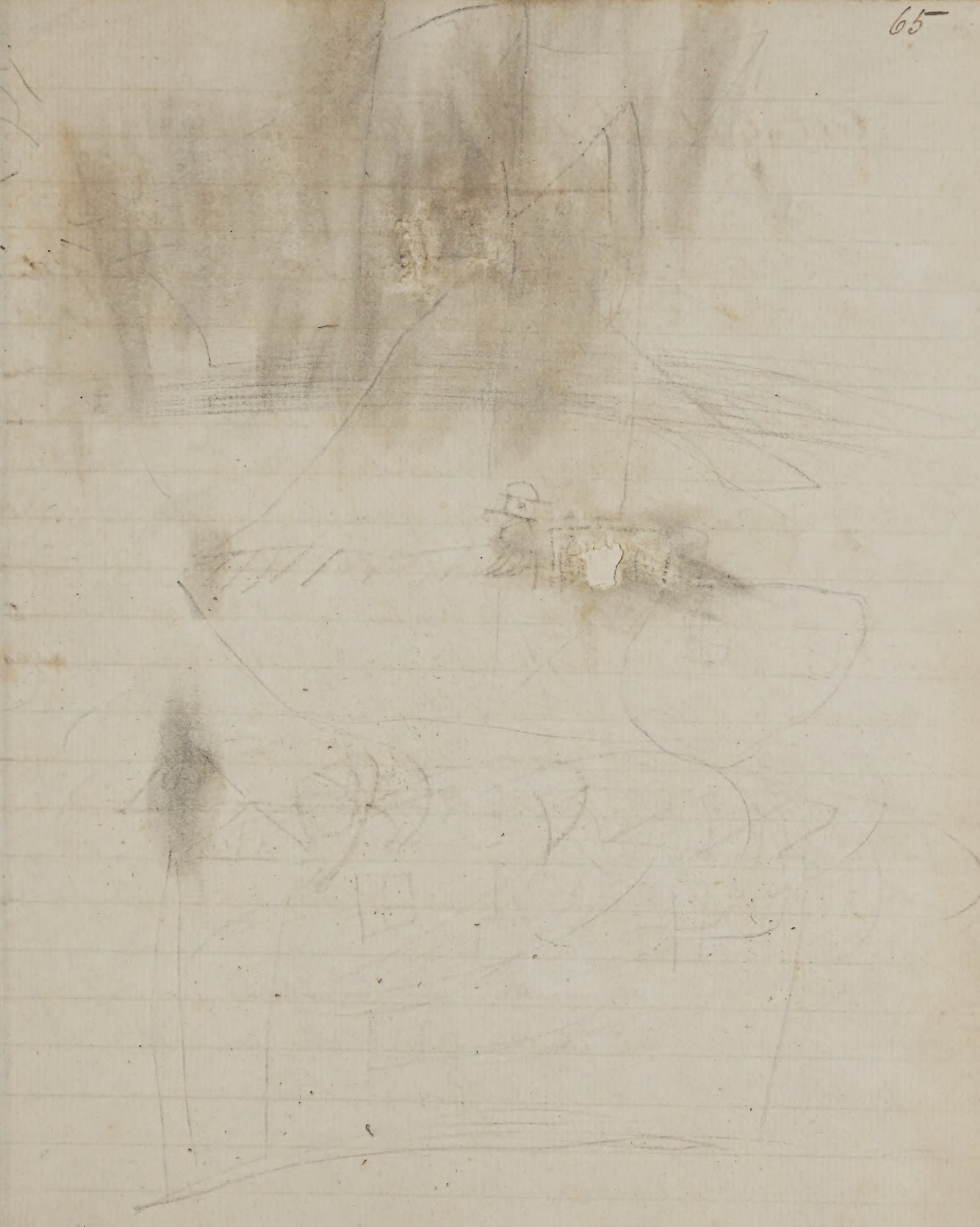
Make fast a stout tail Block to the Fore-Top-Mast stay five or six feet from the Bus, nearly over the place where the yard is to be slung, Reeve a stout gantline through this Block and over haul the end inboard, for a yard rope.

Now launch the Sprit-sail yard forward on the Starboard side of the Forecastle, and fit, and put on the Iye, & Parrel, then put on the yard arms two small double straps, and thimbles, for the Flying Jib sheets to lead thro' next to these put on straps with thimbles for the Jib guys to run through, then put on the foot ropes, and Brace Blocks, then the Blocks for the Lower Boom guys, outside of these put on the straps with thimbles for the flying Jib guys, and last of all put on the lifts, and nail on the stirrups.

Now bend the yard rope on the Starboard side of the slings, and stop it out to the Larb^{d} yard arm, and also clap on a quarter stop. Reeve the Starboard lift & Brace, and have a guy from the Starb^{d} outer Boom iron on the Fore yard, to the Starboard Sprit-sail yard arm. Now Man the yard rope & Starb^{d} Brace

have the Starboard Lift & Brace ready to run, and sway the yard out with the yard rope & Starboard Lift; Point the Starboard yard arm under the Bowsprit by the Starboard Brace and guy, then run the Starb.d Brace & Lift, cast off the outer stops and cross the yard, hook the Tye to an eye Bolt underneath the Bowsprit, near the Cap, and seize the Parrel lashing. Cast off the yard rope Block and guy and get them inboard, run the Jib and flying Jib guys through their respective thimbles in the Spritsail yard turn double Blocks into their ends, run the falls and set them up to other double Blocks in the Bulwarks just forward of the Cat-heads.

When the Gown Boom Guys are run through Blocks on the Sprit-Sail yard, the end, at standing part, goes with an eye over the yard arm inside of the Strap & thimble for the flying jib guys.



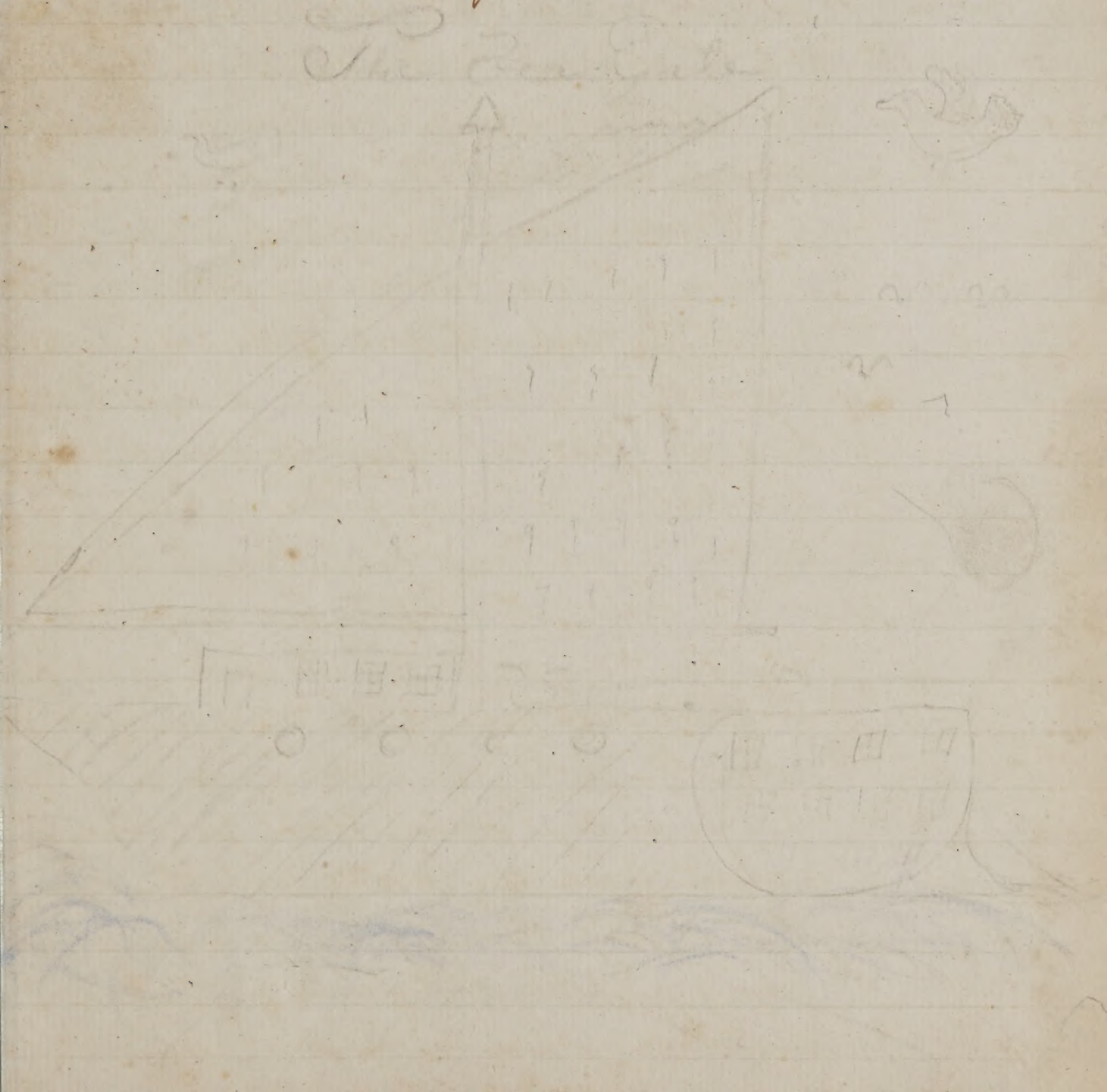
Get out & Rig Flying Jib-Boom

First launch it forward on the Starboard side of the Fore castle with the end over the Bows; = Make fast a tail Block to the Jib-Boom end, and run a hal rope through it, and then through the sheave hole in the hed of the Flying Jib boom, and stop it to the Flying Jib-Boom end, reserving end enough for making fast

to rack both parts of the hal rope together about half way out the boom & bend on a rope end to the hal of the boom, for a hal rope, also have slip ropes out on the Bowsprit & Jib boom; = Now man the hal rope, Rig out; and point the Boom through the iron with on the end of the Jib Boom, double the hal rope by making the end fast to the Jib guys, cast off the stops & racking, and rig out the Boom; = far enough for putting over the rigging; in doing which

1st put over the Royal Bowline blocks, foot-ropes, flying-jib guys, martingale stay blocks, reeve the Top-gallant, Royal & Skysail through their respective sheaves in the jib, flying jib & jib & jib boom, and rig out & stop the hal lashing, seize on the foot ropes and

and set up the martingale stays, and then set up top-gallant, Royal & sky-sail stays, & haul bought the flying jib & jib a jib stays,



Sway on Board Lower Yards

Rig up and hook both quarter Gins to the bights of a couple of stout stops passed around the Down Mast-head just above the eyes of the rigging, (observing to have the stops long enough to allow the Blocks to hang underneath the Top) one on each side;

Tow the Yards along side, lay on the Starboard side, and unhaul down the Larboard Gun, & hook it to a good strap on the Starboard quarter of the Yard;= Man the gun fall, and sway away until the gun Blocks is above the gunwale, and then hook the Starboard gun, to the same place, hang the Yard by it, and fleet the Down Block of the Larboard gun to the slings of the yard:= Bend on a stout guy forward, to the upper Yard arm, and have chocks placed on the gunwale for the Yard to land on, Haul taught, walk away, attend the guns, and guy the Starb'd Yard arm forward under the bow Slings, when high enough sway away the gun falls and guy as it is necessary and land the yard on the chocks:= Unhook the guns, cast off the guy, and proceed to Rig the Yard.

Rig a Lower-Yard

Middle the Yard, Turk leather it in the slings, and place the D-Thimble chock. Turk parcel the D-Thimble and leave it on, with a Spanish windlass, or with a couple of Jacks the lashing to be of well stretched rope, passed on the bight, from the middle, Thr turns to lay fair over the Yard, & to side on the Thimble; frap all parts together and worm it with Nathan; = on each side of the D-Thimble a little room for the chain slings to pass around the Yard: = Th thin lash on the Quarter-Blocks for the Top-sail Sheets to leer through and span them together; = Next seize on the straps & thimbles for the Trusp Pennants to run thr and over the Trusp Pennants around the Yard: = Next seize on the Clue-garnet-Blocks; and then seize on the Rolling Tackle straps well out on the Quarter of the Yard: = and then seize on straps with hooks, just outside the Quarter Boom iron, for the Sail Lashing of the Topmast-Studding sail boom. and next fast on the Top-Burton straps, out on the Yard arms: =

Now for the Yard arms and first fast on the Jack-stays, next the head earing straps, then

the foot-ropes, then the yard tack strops, then the Brace Blocks, and next the Lift-Block. & last of all the standing part of the Lifts, which go on the yard Arm with an eye. a is driven around the yard arm

After this nail on the stirrups, drive in the staples, and run and set-up the Jackstays, also set up the Foot-ropes, and the yard is completly rigged, therefore I will prepare to cross it.

Cross a Lower Yard.

Send up the Gown Slings through the Pigion Hole having a thimble turned in, to this thimble splice the lanyard, which should be of the same size as the lanyards of the Gown Rigging, Lash the slings around the Gown Mast-head above the eyes of the rigging = Tack up the up= a gun Blocks, and hook them to straps passed around the body of the Gown Cap; hook the down Blocks of the guns, to stout-long straps passed with a round turn a= round the quarters of the yard, over the Lifts & Braces and hook the yard Tacks forward, to keep the yard clear of the Mast as it goes up: Now man the gun

falls and Lifts, attend the Braces & Yard tacks, & away away, when the yard comes up as high as the Futtock staff, pass the Lanyard of the slings, take as many turns as necessary, and secure the end by frapping all parts together; = Reeve the truss pennants; = turn Blocks into their ends, and reeve the falls: = come up handsomely unhook the guys & Yard tacks, and cast off the straps and send them down, haul taught the trusses and lay the Yard square by the Lifts and Braces. serve the Main Yard in the same manner, and then, and then;

Rig & send up the Cross Jack Yard

I should get my cross Jack yard on board in a similar manner, only in the place of guys I should use a couple of Mizen Pendant-tacks, hooked into the Down Pendants: = The Cross Jack Yard has an eye attached to an iron strap which goes around the slings of the yard; next on each side, outside of this iron strap; seize on the Quarter Blocks for the Top sail sheets to reeve through; then outside of them on one side, seize on a strap & thimble for the truss Pennant to reeve through, and on the other

side a single strap for the standing part - to make fast to; = Now Rig the yard arms and first - put on the Foot - Ropes, then the Lifts which goes with an eye; = The Brace Blocks are strapped around the yard arms, a sufficient - distance inside of the Shoulders to clear the Main-Top-Mast Back Stays. Nail on the Stirrups, Reeve the Foot - Ropes thro' them and secure them by thimbles and a Lanyard to each other, and seize the middle of the Lanyard, when passed to the iron bolt in the Slings; =

Now Reeve the Lifts & Braces, and sway the yard up by the Pendant - tackle, & Lifts; when up Reeve the Truss Pendant, and shackle the slings, unhook the Pendant - tackle, haul taught - the truss & square the yard by the Lifts and Braces.

Sway on Board a Top=Sail=Yard

Lash a stout single Block at the Top=mast head above the eyes of the Rigging and rove a stout hawser through this Block for a Yard Rope,

Now Tow the Top=Sail=Yard along side & man hand down the Yard Rope on the side of the Ship, bend it on to the slings of the yard, and stop it securely to the yard arm; =

Man the Yard rope & away away; haul the upper yard arm clear of the Top, and the Lower yard arm forward of the Rigging inboard & clear of the Bulwarks, bend a ropes end to the Lower boom iron, Lower away the Yard rope as necessary, and walk aft with the Lower Yard arm, if it was the Fore top Sail yard that=2 was getting in, but if was the Main or Mizen walk it forward, and Lower the yard on the chocks, unbend the Yard rope and proceed to rig the yard.

Rig a Top=Sail=yard

Middle the yard, tar & leather it in the wake of the slings, and give it a good lick of tar in the wake of all the rigging that is to be put on it, Mean the centre of the yard lash on the Eye Blocks the diameter of the Top mast apart, next seize on the Parrel just out side of the Eye Blocks, and nail cleats on the yard out side of the Parrel, then outside the Parrel lash on the Quarter Blocks which are to hang under the yard, and are double Blocks, one sheave hole for the Top, Gallt shut, & the other for the Top=sail clew=line to reeve through: = next seize on the Roling tackle straps with out on the quarters of the yard, seize on the yard arms Top Burton straps, with thimbles in them; = now rig the yard arms by first putting on the Jack=stays, then a strap and thimble for the head earings, next the foot ropes then the Brace Blocks, and last of all the lifts, which goes on the yard arm with an eye, The Flemish horse is seized to the boom iron, & to the yard inside of the shoulders, the Jewel Blocks for the Top=mast=stunsail=sail=halyards to reeve through is also seized to the boom iron, now nail on the stirrups, reeve the foot ropes through them, and seize them to the opposite quarters of the yard

over the jack stays through the staples on the yards, and set them up with a lanyard, to each other, in the slings, the yard being now properly rigged, cross it immediately if not sooner.

Cross a Top-sail-Yard

Bend the yard rope on to the slings and stop it out to the upper yard arm as before; also have a good stop on the quarter of the yard; and hauling lines down for the ends of the lifts, sway aloft the yard, * & haul up and reeve the lifts through the lower sheaves in the sister Blocks, and have a Top button ready to hook to the lower yard arm; = as the yard goes up bear the upper arm clear of the rigging &c. take in the slack of the lifts, and when it is a little above the Top, cast off the upper stop, sway away again, hook the button, and when the yard is high enough for roping, cast away the quarter stop & upper lift, bowse on the button & lower lift, & cross the yard. pass the Band over the braces, and lay it square, Rave the Tyes, unhook the buttons, unbend the yard rope & send down the Blocks: Proceed in a similar manner with the Main & Mizen-Top-sail yards, * place the lower yard arm in a shoe to prevent it from cutting the Deck.

Rig the Spanker Boom & Gaff

I would now away on board my Spanker boom and Gaff with the Fore & Main Yard tackles, Ship the Spanker boom & rig it, put on the Shut-blocks which are seized in the bight of a Strop around the boom, one on each side, and cleat them, put on the end of the boom foot ropes, which should go with quarter seizings like those of the Flying Jib boom. then the guys which should go with a cut Splice & gun tackle purchase, hook the Topping lift to an iron Span on the Boom, and reeve them through the sheave chocks Spiked on the Bibb chocks of the Mizzen Mast. one on each side, seize on the foot ropes to the straps of the Shut-Blocks, and Cotch the Boom,

Now get up the Try sail mast by one of the Pendant tackles, put on the hoops, & Ship it on the Spanker boom, place the Saddle & Lash it to the Mizzen Mast head, after this, get on board the Spanker Gaff and fit the throat & peak halyards, the upper double Block of the throat halyards is always Strapped with 2. legs to Lash around the Mizzen Mast head

above the eyes of the rigging, the legs to be sufficiently long to allow the neck of the Block to hang clear of the cheeks between the trysail trus,

The upper double Block of the Peak halyards should be stropped to an eye attached to an iron horse shoe plate on the Top of the Mizen Cap, & the single Block to an iron eye on the Quarter of the Gaff. The standing part of the halyards is hooked to a strap with a thimble put over the end of the Gaff. Single Blocks for throat Brails are stropped to eye bolts underneath the Jaws of the Gaff on each side; small sheave chocks are spiked on the Gaff one on each side for the peak brails to run through, having a couple of small sheaves in the Jaws for them to lead through

The Vangs should consist of two single Blocks spanned together with a cross seizing underneath the Gaff, & they should go with a gun tackle purchase the lower Blocks hooked to an eye bolt in the sheave Bumpkin one on each side, over the Ensign halyards, away up the Gaff, & haul tought the vangs.

Stowing Hold & Spirit Room.

After rigging the Lown Mast, or Lower if necessary, I would prepare, and commence stowing the Hold; = If possible I would first obtain from the Construction a Draft of the Ships Hold then see the Limbers passage clear, the Hold thoroughly cleansed & dried, the Limber boards placed & the Hold swept clean and white washed Fore & Aft.

There should be hoop poles or other small Ships laid on the ceiling at right angles with the Kelson for the ballast to rest on so as to admit air, water, &c. and the ballast should be well white washed when stowed,

Having made all necessary preparations I should weigh the quantity of Ballast required and whip it on board with a derrick in each gang way, but it is much better if possible to rig both Lown Masts & Top masts & away the Lown & Top sail yards across before stowing the Hold, in which case you will have the Fore

and Main Gunes to get the articles on board by.

Stow the Kentledge as follows, commence at the Block Room bulk head and lay a tier on each side of the Kelson and extend it aft to the Spirit Room bulk head, observing always to stow equal quantities of Kentledge on each side of the Kelson in order to keep the Ship upright.

The Ballast should be stowed by the particular build of the vessel, for instance in a ship with a ship with a flat bottom or floor it should be stowed in the shape of a turtles back, or in other words well in the body of the Ship, say from the after part of the Fore Hatch to the after Bulwarks, but a sharp Ship requires it to be stowed some what similar to this figure it should extend nearly to the greatest body Fore & Aft. say from well Aft in the Spirit Room, to well Forward in the Hold or nearly to the Cole Room Bulkhead, tapering off gradually as you proceed Fore & Aft; and as the Ship is Sharp or Full diminishing it great the ends to a single piece of Kentledge, as a sharp Ship rolls quicker than a vessel with a flat floor the Ballast being stowed in this way will certainly

case her in both cases, besides the great weight of the shot in the shot-Lockers in the Main Hatch way requires the Kentledge to be stowed as above mentioned.

The centre of gravity in all vessels is presumed to lay immediately Forward of the Main Hatch, or where there is the greatest breadth of Beam on the floor, consequently Vessels of great flooring and little depth of Hold require it to be preserved as far out as possible by winging the ballast well out, and those of little flooring, & great depth require it to be stowed close to the Kelson in order to keep it as low as possible, I should be guided by the Constructors draft in Trimming her by the head or Stern,

I would recommend the Beds for the water casks & place them on the Kentledge, the largest & strongest of the water casks I would strike down first and with them stow the Tiers next to the Kelson for the ground Tier, bung up, bilge free, & Chimes clear, keeping the Bilges of the casks free by placing hanging knees or Crown Timbers, endeavouring to make the gauges of the Starb^{d} & Port^{d} casks correspond to each other.

stow the next Tier on each side of the Kelson with the next casks in size, bung up, & bilge free, and so continue winging out until all the ground Tier of casks is stowed, the breakage of the casks to be at the Fore=Hatch:way, observe to have a sufficient quantity of well barked wood laid on the Iron ballast in the Breakage Fore & Aft, so as to make the surface of the hold level & easy for the water casks to lay on, fill in the ground Tier and bung them up,

I would stow the Naval stores, such as Tar, Pitch, Rosin, Turpentine &c. on each side of the Kelson, between the breakage of the Casks at the Fore hatch way, & the Forward Bulk head.

Stow the riding tier bilge & Cantline with the bilge perfectly free thereby leaving the bung holes of the ground tier clear for the pumps.

Chock off both ground & Riding Tiers with wood, which should be always barked for the purpose of keeping a clean hold,

Stow the Beef on one side & the Pork on the other well in the wings & under the Main Orlop stow the more delicate articles of provisions such

as Flour, Rice, Beans &c. Last and chock off all with wood, Stow the gang Casks amid ships and the Breakers on each side of them,

The Spirit-Room should be stowed in a similar manner, only commencing forward with the Largest Casks, & stowing aft, the Breakage to be at the after Bulk head.

The Spirituous liquors of the Medical Department would stow in the Spirit-Room.

Note The riding Tier is stowed bilge & cantline because it takes up less Space, & causes less Breakage than it would if they were stowed bilge & bilge.

Rig a Jury Foremast

If you have a Spare Main Top mast take it if not take a Fore top mast, or the next largest Spar that you have, Launch it over the Bright heads with its head forward, & fit your Rigging, which should be fitted from a hawser or some other large rope that would answer the same purpose, having Rigged the tress in the dead eyes, & fit the stays, and hook a couple of Pendant tackles at the Jury mast head, & place the butt against the old stump of the ex-mast and with a Large tackle from the main mast head raise the Jury mast on End, taking care to attend the Pendant tackles which should be previously hooked to the side answering for rolling tackles and ease away as required, The Topsail tress, Cap and Cross trees Arran as well on its mast head as it would if it were a Top mast, Set up your Rigging and secure your mast by Lashing the butt to the stump of the old mast.

To clear a Wreck when the Fore mast is gone.

Take in all sail as soon as possible as it would be useless to try to get the Ship before the wind, Then take a hawser and bend it to the main top mast head, and let it up at the Knight heads, also make fast another hawser, or stream cable to the Fore mast or some part of the wreck which leading out the Bowsprit as soon as it is clear from the Ship, she will ride by it until a Jury mast can be Rigged.

In clearing away the wreck your best care must be taken to cut away the lee rigging to prevent the chain bolts from drawing. Then by holding on to the stream cable, if the weather permits you can save as much of the rigging as you see proper.

Bending Sails

Take up the Top Gall^t Yard Blocks & Lash them well to the body of the Top mast caps. Rouse the Top Gall^t Yard ropes & call all hands to bend Sails, one haul down the after end of the Fore top Gall^t yard rope into the Sail room and bend on to the clew cringle, snatch the forward part of the yard rope to a block forward on the Fore Castle, man it well & walk the Sail up until the down part is clear of the Fore Hatch way when lower away and let the bullies receive it on their shoulders as it is lowered down, unbend the yard rope and take it ~~to the bowsprit~~, to its respective place (if a Course) forward of the mast, if a Top Sail on the same side of the mast the respective yard rope is now walk all the Sail out the Sail room in this manner, one after the other until all are out, cast off all the stops on the Top Sails except four or five, open out the Courses bring the clews to the centre of the head of the Sail, & bight the foot ropes to the head leaving on the Buntline cringes to bend the Buntlines to.

now roll up on the bight- having the forward part of the sail upon the inner side, Lay it athwart- the deck bind the buntlins & in the mean time prepare to send the sail aloft-;

For the Courses Take one of the Top Bowlines and hook the double block to an eye bolt- in the forward part- of the Lower Cap, on haul it- down forward of the Top, thro' the collars of the Lower Stays, the fall backing down thro' the bobbins hole, have also a couple of yard whips one on each side made fast- to the outer boom irons,

For the Top sails on haul down the Reef tackles in the Tops to assist in bringing it to the yard, have a couple of small Jiggers one from each outer boom iron on the Top-sail Yard,

For the Jib, unrove the Jib stay & bring the end inboard, & rove it through the hanks of the Jib, bring the hanks together and rove the down-haul, and bind it to the head of the sail, and rack it well to the Lower Hank, clap on one or two stops on the sail, on haul down the Jib haulyards and bind them on to the sail, Pass the end of the Jib Stay out on the Bowsprit- bind

the reving line to it, and bend a rope out to the shut-clue.

Lower the Spanker Gaff, bend the throat- & peak lanyards, hauling the sail tought- across the head, pass the lashings, bring the sail tought- [illegible] the lacing hook the Peak and throat- [illegible] Haulyards, reev- & bend the braids, outhauler & shuts,

Now on haul down forward of the masts the Top Gallt Yard- ropes, Top Burtons & Yard whips, Make fast the Yard ropes around the body of the Top-sails, hook the lower Block of the Top burton to a stout-lashing passed around the bunt of the course, & stop the clues to thimbles in the stirrup of the lower Block of the Top burton; bend on the Yard whips to the First-ruf [illegible] ringle, Snatch & haul along the falls of the yard Ropes, Burton falls, fish haulyards, & down haul, have the gun ready for loading in the Tops, Now haul tought- & away aloft- the Topsails until the clues of the sail are above the Tops, Sway the Courses up to the Forward edge of the Tops & the fish high enough to haul it- out to the boom end, calculating to do so at the same time that the sails are brought- to the yard,

Bend on the reef tacks in the Top & toggle the Top=sail buntlines, when ready, man the Jib down haul Yard whips, Down & Top=sail=Buntlines, Top=sail Reef tacks, & Spanker Throat & Peak Haulyards, attend the Yard ropes, Burton falls, & Jib Haulyards, send the Top & Down yard men aloft—, Man the Boom tricing lines, Trice up, lay out, haul out the Yard whips Top=sail=reef=tacks, & Jib down haul, hoist away the Throat & Peak Haulyards, Down away the yard ropes and bring the sails again to the yards, & the Jib to the boom end, Set up the Jib stay & over haul down the clue jiggers, Trice up the Tack & sheet Blocks & shackle them to the clews of the Sails = Now haul the clews of the sails by the clue jiggers, unhook the burton cast off the bunt-lashing, & top-gallt yard ropes, and haul up the buntlines; Keep a few hands aloft to bend & reeve all the gear, now furl the sails or let them remain, unreeve the yard ropes, unhook the Jack blocks, & send them down, unhook the Top burtons, & send down the Yard whips.

Get Guns on Board.

((O))

First- get- all the Gun Carriages, Beds & Slides on board by the Yard & stay tackles, and placed at their proper Ports, = Then secure the Main Yard by putting a good strap around the body of the Main Lash, and another around the Top mast- above the Main Lash, hook two Pendant- tackles in their straps and to a couple of good straps fitted on the yard arm for that purpose, just- about- where the Jeers which should be so placed that it- will be just- a little outside of the rigging for it- when the yard is braced up, ~~would take on the yard,~~ ~~and the Jeer Block, together with the lifts of the~~ ; = It- is also well to have another good Tackle hooked on the opposite side of the yard as a support- = Now brace the Yard over the Port where you intend to get the Guns in, haul tought- the braces & pass a lashing around the body of the Yard & Mast-, Lash on the upper Block of the Yard tackle, (which should be a three fold Block) on the yard where the Burton & Pendant- tackles are.

The Guns being along side in a boyne or scow, proceed to sling them by first- fastening

putting the bight of the slings on the Pomeions, of the Guns & then tacking them well down about half way between the Trunnions & the Muzzle, Toggle on hook the lower purchase Block to the slings, and away away,

* There should be a hole in the Deck, on the Port entering abreast the Main Hatch, over a Pinchant usually called a garnett rove through it with a hook in the upper end & a thimble in the lower end to the upper end of the Main stay tackle is hooked when the Gun is high enough for the Breech to enter the Port: both top buttons are generally hooked from the forward eye bolts in the Main Cap to the stay, this prints it from sagging down & when there is a carriage to receive it, when the Gun is high enough hook the garnett into the Pomeion hole & away away on the stay tackle easing the Gun into the Port by lowering handsomely the Purchase, have a small tackle athwart the Gun Deck which hooks to the breech of the gun to assist in placing it on the carriage, when the Gun is safely landed on the carriage, transport it to its proper Port, & bring another carriage for the next Gun, which get on board in the same manner.

The Carronades on Upper Deck Guns are generally got on board by putting a toggle in the muzzle or

1 Year of using a Garnett & Pinchant Tackle on the Lower Deck with another Tackle on the Upper Deck

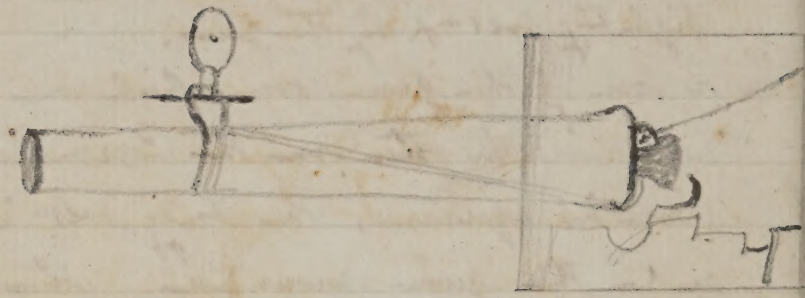
& away the gun up in board & lash it on its side, ship the naval bolt, unhook the purchases and run the gun to its port, ship the fish tackle & rig the gun.

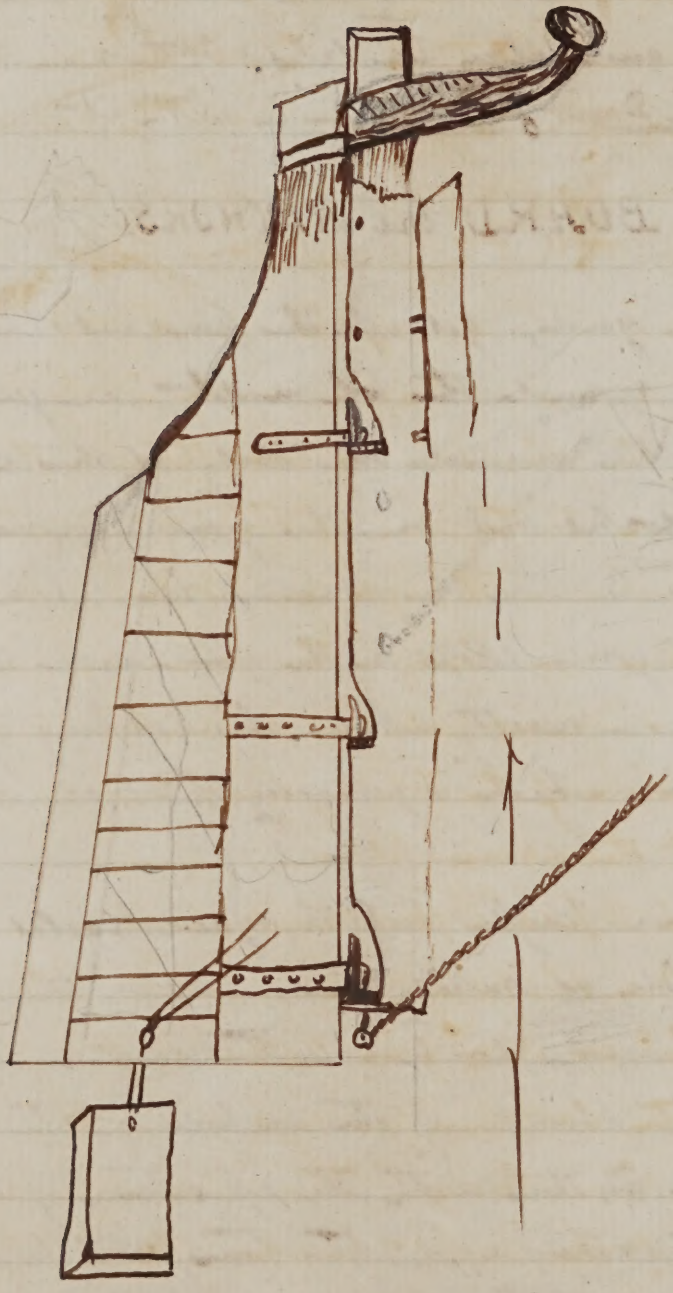
on bow of the gun, over which one bight of the slings are placed, and the other over the Barricadoes, in this way they always come in square. The Lugg bolt is taken just in its place, and the gun mounted, they are usually hoisted over the rail by yards and stay tackles. If the main mast only was in 2 would rig the Fish Davit & get them in with it.

GET on BOARD the ANCHORS.

Secure with the yards, get up the pendant tackles and hook them to strops around the top mast, one just above the cap and the other around the body of the cap, then hook the lower blocks out on the yards arms on the side you intend to take the Anchors in, at which there should be two good strops on the yards arms to hook them securely to and exactly where the lashing of the purchase block is, which is generally the Fish or top tackle gun,

To assist your buoys have the yard tackles hooked on the opposite side as rolling tacks, haul taught the bunton to prevent, and lash on the purchase block a little below the shank of the anchor on the side you wish to stow up, & then with the assistance of the main yard & main stay, sway up & stow them, the fore yard may be braced to as the anchor requires,





Reeve and Fit Running Rigging

The Fore & Main top sail clewlines should be fitted with a pendant and single whip,

This is an excellent way to fit Top sail clewlines the purchase is increased as there are no blocks at the clews of the sails for the points to catch when clewing up the Topsails.

For the length of the pendant previous to its being fitted, take the extreme length of its respective lower mast head above Deck. a single block is spliced in one end, and the other end is rove through the Quarter block and clinched to the clew of the sail, = The whip or clewline is first rove through a block on Deck at the Fife rail then taken up through the inside of the Top, then through the Pendant block, and the standing part brought down inside of the Top again & made fast at the fife rail at the same place.

Fore & Topsail Buntlines should go single after leading thro' a block at the Ships side, they should be taken up thro' an iron fair leader that is sitted in between two of the cat harpin lgs close to the Futtock staff, then through the upper sheave in the buntline block at the mast head, then thro' ligards on

on the yard, and then are toggled to the foot of the sail, one on each side,

In Port the tails of the lizards are taken abaft the Fye blocks & knotted together, in order that they may traverse up and down the Fyes with the buntline blocks, it being then necessary in furling, that the foot of the sail should go well up, & But at sea the tail of each lizard is made fast around the neck of its respective Fye block strap to assist the buntlines when they are hauled tought in spilling the sail, when by them being brought close to the yard

For the Main Top sail reef tackles, should run thro' a block at the Fife rail & taken up forward of the lower rigging thro' the inside of the Top and thro' the after shiver hole in the Lizard blocks, then thro' the shiver hole in the yard arm, then thro' a close block strapped to the reef cringle of the standing part clinched to the neck of the boom iron

For the Main Top sail Bunt-runners after having thro' the lower shiver in the Top sail Buntline blocks should have a hook and thimble spliced in the forward end and a single block in the after one, they should go with a Gun tackle purchase the lower block being strapped to the Top mast fid.

The Mizzen Top sail clew lines after leading

thro a block at the ships side, should be taken up thro an iron fair leader, that is sitgen in between two of the lower cat harpin legs close to the Futtock staff, then thro one of the sheave holes in the Quarter blocks, then thro a single block strop ed to the clew of the sail and the end made fast to the Quarter of the yard outside.

The Mizen Top sail bunt lines, should lead thro a block at the ships side & taken thro an iron fair leader in like the clew lines, over thro the outer sheave hole of a small block that is stropped to an eye bolt in the Top mast rigging the fore abaft the mast head, then through a small ligand on the yard, and the ends toggled to the foot of the sail, one on each side.

The Mizen Top sail reef tackles should go single from the sister block to the leech of the sail, an eye & thimble should be spliced into the lower end in which the upper block of the top bunton should be hooked, the lower block should hook to a small strop with a thimble which is spliced around the lower after shroud under and close to the Futtock staff, the bunton falls leading down to the ships side, one on each side.

The Mizen Top sail bunt runners should go with a single whip, they are rove thro the eye sheave

hole in the buntline block at the Trusstle trees and a hook and thimble hooked in the forward end, they are hauled up hauled in the Top.

The Fore Top Bowline after leading thro a hole in the Bulwarks forward just above the breast hook, is rove thro the outer sheave hole of a double block that is hooked to an eye bolt in the after part of the Bowsprit Cap. and an eye being spliced to the end of it, it is toggled to the bowline bridle in the leech of the sail.

The main Top bowline after leading thro a block at the ships side is taken up and rove thro a block that is strapped to an eye bolt in the after part of the Fore cross trees near the Trusstle trees and the end toggled to the bowline bridle.

The Mizen Top Bowline after leading thro a block at the ships side is taken up and rove thro a block that is seized to the after main shroud above & close to the Fattock staff, and the end toggled to the Bowline bridle.

Clew jiggers are used on the Top sails and courses while in or going into port, for the purpose of hauling the clews of the sails well up for furling, = they should consist of a gun tackle purchase, The upper block of the Fore and main Top sail clew jiggers should be hooked to a small link, placed over the gun sling hook, and the lower block

should be made fast to the clews of the sail by a tail.

The upper block of the mizen Top sail clew jiggers should hook to an eye bolt in the forward part of the Top mast Trusstle trees.

The upper block of the main clew jiggers should hook to the clew jiggers strop over the Forward edge of the Top one on each side and the lower block to a small strop with a thimble fitted to the clews of the sail, the falls of the Top mast and lower clew jiggers to lead on Deck at the fife rail.

The clew garnetts after reeving thro a shaver hole in one of the fife rails bitts should be taken up and rove thro a block at the quarter of the yard, then thro a double block strapped to the clews of the sail and the ends bent to a strap & thimble a-round the quarter of the yard outside of the Block.

The Fore Buntlins should be fitted with a pendant block runner and whip, a single block should be spliced in one end of the pendant, and a hook & thimble in the other. and hooked to the after quarter eye bolt in the lower cap, the pendant to be of sufficient length to allow the block when it is hooked to hang clear above the eyes of the lower rigging the runner should be rove through this block, having one end spliced to the middle of a span fitted to the foot of the sail, and a single block spliced in the other thro which a whip or buntline is rove, one end being made

made fast to an eye bolt at the Fore partners, and the other leading thro' a block at the fife rail mark at the same place, = The above mentioned Pendant-Block should be wormed and wormed neatly with canvas and painted.

The main Buntlins & Leech lines fitted in a similar manner, with the exception of having a double pendant block instead of a single one, and the Buntline legs reeving thro' this block are tyed seperately to the foot of the sail, the runner block being siezed to the bight of the buntline legs, = The Fore Buntlines are sometimes fitted in this way.

The Fore leech lines should reeve through a double block (which is to be unhooked in Port.) shaped with a hook and thimble, and hooked to the forward quarter eye bolt in the lower cap, then thro' tail blocks made fast to the jack stays on the yard arms, and brot to the leech of the sail, the standing part leading over and the running part inside of the Tops, down through blocks at the Fife-rail.

The after Fore leech lines after leading through blocks at the side of the Mast should be taken up and reeve thro' a double block fitted with a tail

hauled up close forward of the yard & made fast to the D=thimble, then thro. small tail blocks made fast to the jack stay on the yard arms close up to turn the sail under yard and unto to the leech of the sail.

The main leech lines are fitted in a similar manner to the forward and after ones,

A bleach line is very frequently made use of as a bowse for the purpose of hauling up the bleach sail under the slings of the yard, and also to haul up the foot of the sail in calm or light weather, or in the act of going into port so that the Officers aft may see under it. It should be rove thro a single block seized on to the upper strop of the Quarter blocks and then end spliced to a small eye fitted in the foot of the sail.

The fore Haul yard after leading thro a Block at the ships side are taken up abaft the fore under the eyes of the Fore mast rigging and thro a single block hooked to an eye bolt in the Fore top=mast truss the turns in a line with the forward part of the Fore mast, then thro a single block hooked to the head of the sail, and the end taken up again and spliced to an eye bolt in the forward part of the Fore top mast truss, on the opposite side,

The Jib down haul after leading through the Bill warks forward on the [illegible] side is led thro' a single Blocks seized to the traveller the end taken up thro' the hawse and made fast to the head of the sail.

note The Jib, & Fore Top=mast=stay sail Haulyard Blocks should hang between the standing parts of the Topsail tyes.

Fore Top Gall.t braces are rove down thro' the Brace blocks at the Yard arms, then thro' the leading blocks stropped to the eye bolts in the Bill cheeks of the Main mast and down on deck; = standing part=makes fast to the Top mast=Stay.

The standing part of the Mizen Top sail Braces should go with a running clink around the middle eye bolt in the Main Cap, rove thro' the Brace blocks at the Yard arms then through double blocks stroped down on the after part of the Main Cap, or Top, one on each side and led down on Deck to the Fife rail.

Spanker boom Topping lift=hook to the iron span on the boom and rove thro' through three cheeks spiked on the bibbs cheeks of the Mizen Mast one on each side, they should go with a luff Tackle pendent the single block being spiked into the end of the Top= ping lift, and the lower or double block stropped

around a thimble on the traverse rail which goes half way round the Mizzen Mast.

The standing part of the Main Brace make fast to the Quarter, Fore brace to main stay, lead through blocks on the Yard arms, and then thro' other single blocks just under the Main Top for that purpose & down on Deck, to the fife rail

Cross Jack brace to Main Shroud

Spritsail brace thro' a thimble on the Fore stay under the Tops & down on Deck.

Fore Top sail braces make fast the standing part to the Main Top mast head, lead through brace blocks on the Yard arms; thro' blocks on the collar of the main stay; thro' blocks on the bibb chocks of the Main Mast & down on Deck

Main Top sail brace make fast the standing part to a traveller up & down the Mizzen Top Mast, thro' blocks on the Yard arms, and down through blocks on the Mizzen Mast.

Fore Top Mast stay lead thro' two on the Bowsprit Main Top Mast stay thro' Hearts in Fore top, set up to its own part, = Mizzen Top Mast stay thro' a heart in the Main Top & set up there to its own part.

Fore Top Gall[t] stay thro' a shave hole in the

in the after part of the Cross Trees

Jib stay thro' a Thimble, then through the hole in the Jib boom and in on Deck

Fore top Gall.t stay through a hole in the Jib boom just without the above hole for the Jib stay.

Main Top Gall.t stay

Mizen Top Gall.t stay thro' a fair leader at the main cap, Mizen Royal stay through a fair leader at Main top mast head

Fore Royal stay thro' the flying jib boom, and down through the Martingale

Main Royal stay thro' a thimble seized on the gunnel of the Fore Top Gall.t Mast.

Mark a Lead Line.

In Marking a lead line there are nine Marks & eleven cloths, viz:

At 2 fathoms a piece of leather with two strips

At 3. fathoms a piece of leather with 3 strips

At 5. fathoms a white rag.

At 7. fathoms a red rag.

At 10. fathoms a piece of leather with a hole in it.

At 13. fathoms 3 strips of leather

At 15. fathoms a white rag

At 17. fathoms a red rag.

At 20. fathoms a piece of leather with two holes in it.

At 23 fathoms a blue rag. & At 25 fathoms a knot.

Deep sea leads are marked with a knot for every two fathoms & a single strip for every fine.

Rules for RIGGING & Cutting

The Lower Rigging of a Man of War should be made of the best hemp.

The size of the Fore & Main Shrouds should be one Inch for every ten feet that their respective masts are in length and the Mizen one inch for every twelve feet.

This proportion is to run as high as a 74 of the second or smaller class, as this size of rigging would be sufficiently large for any larger Ship with an additional pair of Shrouds to each mast. = The larger Ships having more beam and the masts of a Three Decker or 74 of the same class being the same height above Deck which would be the means of their requiring no stouter Shrouds than a Seventy four of the 2nd or smaller class.

For the length of the 7½ pair of Shrouds take the mean sum of the Lower mast from half around the head above the bolsters to the partners on the Upper Deck adding one sixth to the breadth of Beams for the angle out to the chain eyes.

Top mast Shrouds should be six tenths of their respective lower Shrouds.

Top Gallant Shrouds should be five sevenths of their respective Top mast Shrouds.

All Futtock Shrouds & Cat-Harpin legs should be Four-fifths of their respective Top-mast-shrouds

The Lower and All Four & Aft-stays, if as usual there be one longer & one shorter as for instance a Main and Spring stay, then the Main & Fore stay should be once and a half the size of their respective lower shrouds but the best-way is to have all the lower stays of the same size, which ought to be once & a quarter the size of their respective shrouds.

The Jib stay should be the same size as the Main Top Mast-Spring stay.

All Breast-& Top-mast-Back stays should be Six tenths 6/10 of the size of their respective shrouds with the Mizen both breast-& Standing which should be the same size as the main top mast-shrouds.

The Fore & Main Top Gallant-back stays should be the same size as the Mizen ~~on the Top mast~~ rigging.

The Mizen Top Gallt-Back stays ought to be the same size as the Fore & Main Top Gallant-shrouds.

The Lanyards for all the rigging to be set up by ought to be half the size of their respective rigging.

Standing Jib guys should be the same size as

Mizen-Top-mast shrouds;

All Bobstays to be the same size as the Fore shrouds.

Bowsprit shrouds should be the same size as the Fore and Main Top mast standing stays.

Cap Bobstays to be the same size as the Fore & Main Top-mast spring stays.

Stropping on the Bowsprit for Bobstays, Bowsprit shrouds, Cap Bobstays, &c. the same size as their respective Bobstays &c.

Collar Stropping for Fore stays & spring stays half the size of Main stays, fitted double, & for length four times the circumference of the Bowsprit at their respective shoulders clutt; also Mast strops & Lashings for jib booms the same size as their respective jib stays

All Single Block strops Lashed or fitted to yards to be the same size as the ropes which are to rove thro' them; for instance Quarter Block strops for Top sail sheets, the same size as Top sail sheets, Brace Block strops or the yards the same size as the Brace &c.

All Trusses Pendants same size as the respective Top mast shrouds but fitted for single Luff rope the Top mast shrouds being generally of cable Laid rope.

The lengths of Trusses Pendants take twice and

and a half round the lower yards in the slings, and once the extreme length of respective mast-head. this length is sufficient to reach around the lower mast & and up to their respective lower caps the[m] a shear shocks in the after part of the trusstle trus.

All Futtock staffs for lower or Top mast rigging should be made of iron hooked at both ends thus ——— for size in circumference one half the size of their respective shrouds, and for extreme length twice the diameter of all the shrouds which they are to enclose.

Top mast-cat-harpin legs to be once and a quarter the round of their respective Top mast in length. This measure is to be taken around the mast-about where the cat-harpin legs will come or half the extreme length of Top mast heads down from the Tot of the trusstle trus

All runners and tackle Pendants should be the same size as their respective lower shrouds, for length twice the extreme length of respective mast-head for each pair, this is enough to allow them ends to be spliced in the ends of each, they should always be fitted by spanning them together the upper of mast-heads after

Spans for main Top sail braces on mizen mast=
four times the round of the mizen mast at the Pattreas,
this length being sufficient to allow for splicing in the eyes at
each ends. They should always be fitted with a long
or loose eye and seizings, the span to be clove hitch
ed on the mizen mast one quarter of the distance
down from the Trestle trees to the Deck.

Parrels for all Top sail yards to be the same
size as their respective Top=sail=ties, and the length
when fitted complete to be three times and a half the
round of the Top mast one foot above the Town cap

They should be fitted with a long and short=
leg, the long leg to be twice and a half the round
of the mast and fitted with four lashing eyes.

All Top=sail clewlines to be one half the
size of their respective Top sail sheets, = this pro=
portion will also for Top=gallant clewlines and
Royal clewlines.

For the size of all lower braces in circum=
ference take the extreme length of the yards in
feet and the diameter in inches, added them to=
gether and divided by twenty two;

For the size of the Top sail braces in

circumference take the extreme length of their respective topsail yards in feet and their diameter in inches, add them together and divide them by twenty one.

All lower tacks and sheets to be one inch to every fifteen feet extreme length of their respective Lower yards.

All clew garnetts to be in circumference six tenth of their respective tacks and sheets.

All reef tackles should be six tenths of the size of the size of their respective Top sail sheets.

All Top sail sheets in size one inch to every fifteen feet of the extreme length of their respective Lower yards

Royal and Top=Gallt sheets should be one inch for every ten feet of their respective yards.

It is usual to get the extreme length of the Ships Spar Deck, the distance between each mast and the exact stem of the Bowsprit, then by a proper scale draw all the masts and spars allowing for the bury of the Lower mast and exact stem of the Bowsprit which must be done on a plane surface, by this means find out the length of all Fore and Aft stays taking care to add the length of each respective mast head to their respective stays for collars.

It may also be observed that All Stays

should be wormed parcelled and served twice & a half the round of its respective mast-heads. and if you have mouldings on the Lower stays they should be raised once and a half the size and twice the length of the mast-head from the extreme collar, this will be long enough to allow the working of the Flemish eye, it is always necessary to worm parcel & serve all fore & Aft-stays in the wake of the Bees or Blocks.

It is always necessary to worm parcel & serve Top Gallt rigging a little in the wake of the mast-heads Cross trees and Futtock stays of the Top mast-rigging.

All Top Gallt rigging must be fitted by measuring the length from the Top Gallt heads with enough only to set up to the Top, and no other allowance made the eyes to be the size of their respective mast-heads, this allowance for all Ships and no other.

All Topmast-rigging should be cut & fitted in the same manner as the Lower Rigging differing a little in measuring the 1st pt of Top Mast-shrouds, viz: from half around the mast-heads on the Bolsters, down to the Fid hole, and no other allowance made.

All the Brace blocks for the lifts & ruff tackles should be seized in between the two forward pt of shrouds the depth of

depths of their respective Trusses below the eye rising to the upper end of the Block.

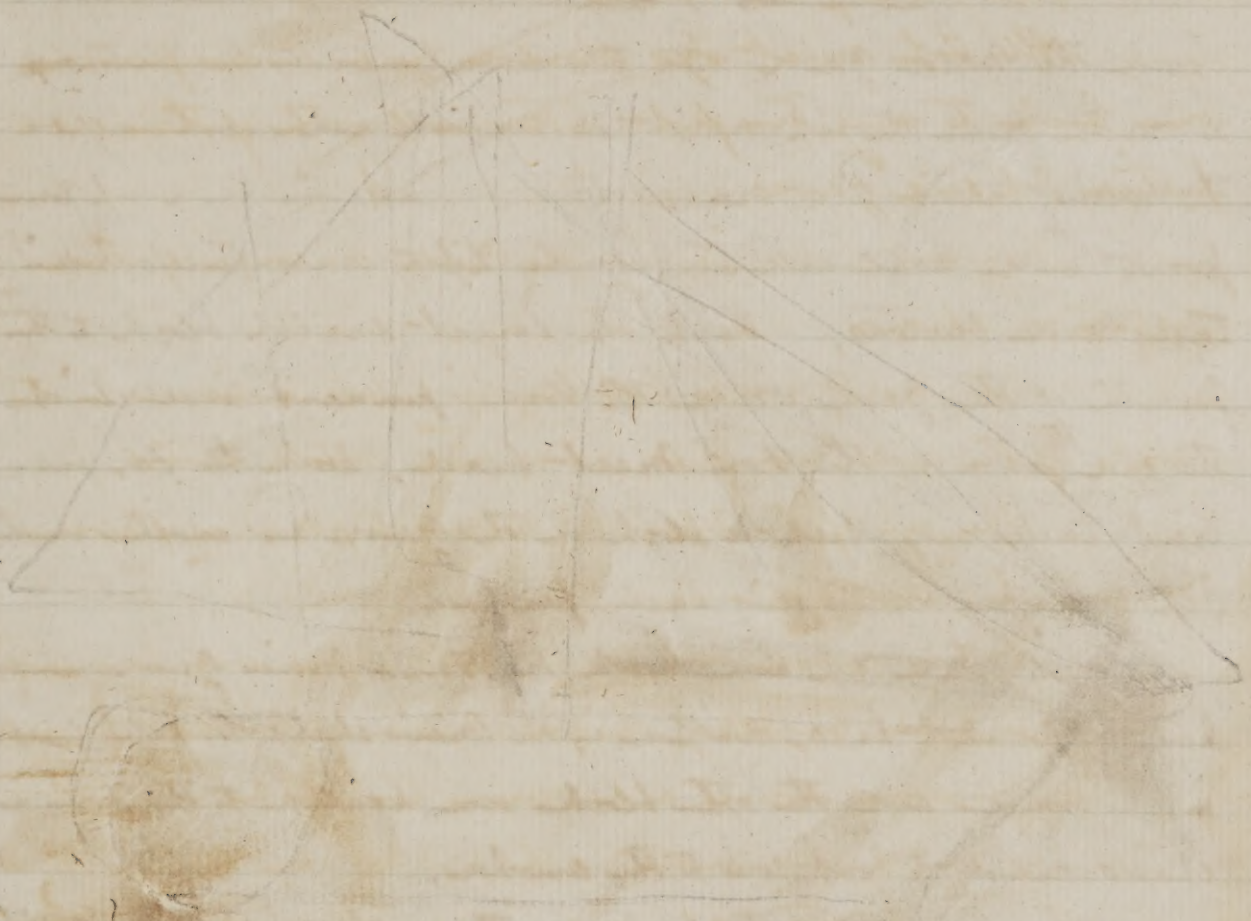
All Top mast-Tys should be in circumference one inch to every ten feet extreme length of their respective Top sail yards

Langards of all Rigging one third the size of their respective shrouds.

Top mast & Top Gallt rigging is to be served in the wake of the cross trees, Tops, Yards, and Futtock stays,

The eyes of the Top Gallt rigging to sit- snug & close down to the Mast-head.

It may be well here to say that- as we now have the size and length of the first- pair of shrouds, I would lay this measure down and drive two stakes at- each end then lay my rigging around the stakes one turn without the other for the other shrouds, cut- in the bights where my end commences and my last- end finishes, a little on one side to allow for the take of the rigging, in allowance of one circumference of the shroud for each after one is sufficient- for the lay of the eyes above each other, after this I would get- my rigging on a stretch & worm, parcel and serve in the middle and wake of the forward & after Swifters &c. &c.



To transport a Sheet-Anchor from the Bows to the Waiste.

Secure the Main Yard with two pennant-tacks for buntons & a bunton from the Top Mast-head, hook and hawl tought the rolling tacks, lifts, braces & trusses, brace the Yard up four points, and hawl tight the lifts, braces, trusses, rolling tacks and buntons, Lash the Largest snatch block to the Quarter of the Yard, reev the Crown pennant and clinch the end aroune the Fore Mast-head, hook the Fore pennant-Tacke and Lash a block on the Yard and another on the Cap to make a winding Tacke purchase.

Trice up and hook the Fore & Main Yard tacks have a pennant-tacke hooked in the Main chains the fall leading in board and the other block ove hauled to the Fore-Chains ready to hook on to the anchor.

Now sling the Anchor with a Span so that it will hang in the position it should stow in the Waiste-Hook the forward Tacke and hawl tought, ease away the Cat and keep swaying on the forward Tacke until the Anchor is under the Yard and then away it as high as you want it, = Then hook the Main yard Tacke to the shank of the Tacke in the chains to the crown & unhook the Cat, If the Anchor is at the Larb.d Fore Yard arm brace in the Fore-

yards by the Larb.d braces until the lifts & buntons are within a
few inches of the Top mast-rigging, hauling at the same time
on the yard tackle and the tack from the main chains, when
abreast the place where the anchor stows hook the Fore topsail
halyards the tye being racked aloft, and a stout-jigger from
inboard to the shank under the anchor to its place, place the
shoes and lower away until the stock is safe in the cross stop-
ers, lash the upper stock and pass the lashings around the
shank and the anchor is secure, unhook the Buntons &c.&c.

If an anchor is to be taken from a boat-along side
the Fore yard must be braced over the place secured as above.

To get a Top-Sail-Yard-Rope out of the chains for going aloft

Un haul down the yard rope and bend it to the slings of the
yard, stop it to the upper end of the yard, hook the buntons to
the main yard and hook the yard tackle so that it will
come directly over the slings of the Top sail yard when the main
yard is braced up, have a guy on the forward yard arm
and one on the after one, sway the Top sail yard up
above the gunwale and brace around the main yard
until the slings of the Top-Sail yard are abreast the
gang way when hook in the main stay tackle, ease away

the

the yard tackle and take on deck:

Disp a Messenger-

Cast off the lashing and come up the turns around the Capstan disp the ends up or down which ever way may be required to pass the eye lashing again.

Splice a new Cable into an Old-One

(If it is not intended to splice them as cables generally are namely one to the other with a short splice and long tailed ends) The Old cable should be taken to a rope walk when it must be got on a stretch, the ends untaid and each strand of the new cable spliced to the strands of the old one by a long splice at certain spaces and then laid up as new cable,

Bend a Sheet-Cable.

Reeve a ring rope thro the ring of the Anchor and lead it into the outer hawse hole, bind it with a timber hitch to the cable two or three fathoms from the end and stopper the end of the cable along the ring rope, have a whip in the fore rigging and slip ropes at convenient distances to help the cable out. rouse out on the whip and as the cable comes through the ring cut the stops until you have end enough to form the clinch

which should be with the gun having the end inside for what is called an inside clinch, the clinch should never be formed longer than the ring of the anchor but as much smaller as possible, the bends just on one opposite to the other calculating the end bend to be the circumference of the cable from the end clinch which should always be rendered through the ring and well stopped; as well as parcelled to prevent it from chafing against the nuts, or stocks of the anchor, or against the bottom when the anchor is gone:

To heave Guns over board

Secure the carriage with the side tackles and lashings to the side and ring bolts of the Ship, (If the gun is housed cast off the muzzle lashing and run out the Gun) Take from your tackles hook two in the housing bolts over the Port, and two in the side tackle bolts, the inner blocks hook to a couple of handspikes around the breech of the gun have them well manned and hand tought; place a roller under the breast of the Gun in the Port-sill, then take from capstain bars two of which should be entered as handspikes to raise the breech of the gun high enough to clear the clamps and the other two should be thrust under the gun as she raises up to prevent her from falling into the carriage again: = Having all this ready open the clamps, unrove the

bowlings

breechings, trice up the lower ports, watch the roll of the ship, and as she comes to leeward haul quick on the tackles, and launch the gun over board clear of the ships side,

Ship a Rudder-

—o—

Before launching the rudder run a rope through a hole in the hub with a weight- attached to it- to sink the hub, bow the rudder under the stern, and bring the ends of the hawser one over each side of the ship at the gang-ways, hook a tackle to the eye bolt in the deck bring it down through the rudder hole and hook it- to the head of the Rudder, sway the Rudder up until the pintals are fair for stepping when bouse the Rudder close to with the hawser, and lower away the tackle and ship it-, unreeve the hawser and weight, ship the tiller, lash it-, and reeve the tiller ropes. = To unship a rudder is easy enough.

Accidents at Sea

Split- a Bowsprit- Cap ship another: Take in the flying jib jib &c. Rig in the flying jib boom, unship the broken cap with the jib boom and rig the boom in as far as the heart- of the Fore-stay, unship the cap and away it- in on Deck with a jigger on the Fore stay, away another out-, place it- upside down and point- the jib boom through it-, get- the boom out- standing the cap as it- goes, when over the head of the bowsprit- let- the cap alone, hook a couple of tacks to the bolts in the cap and haul the cap on with mauls hauling on the tacks at the same time rig the jib boom again, out- with it-, set- the sail &c. &c.

It- is to be observed the jib boom with be too close to the bowsprit-, unless you place a chock or saddle on it- for the boom to travel out- on.

Carry- the jib down hawl what- do? = Untoggle the Fore top gallant- bowline bend it- to the head of the jib & haul down

Carry away both the lee main and weather preventer braces what- do? Untoggle the weather main Top bowline bend it- to the yard arm and haul forward on it-, = If the brace is not- gone in the block take an over hand knot- in the end and haul through the sheave:

Carry- lee brace what- do? = Let- go the weather brace, haul forward on the lee top = bowline, and reave a new brace.

Accidents at Sea.

Carry. away a Top=sail Parrel what-do? = If the Top sails are reefed clew down and point-the yards to the wind, pass a slip rope around the Top and Topmast-and bowse it-tought to keep the heads close as you lower the yards.

Stranded the Messenger what-do? = Stopper and bitt the cable splice the messenger or get-up an other, or get-a on the cable to trip the Anchor, clap the cat-falls to the buoy rope and take the falls to the spare deck capstan

Bowsprit- Sprung.

Put-the helm up, up main sail & Spanker and get-the ship before the wind, haul down the jib, let-go Top Gallt Halyards and furl top gallt sails, unreeve top mast-~~rope~~ spring stays and set-them up through the Starb^d hawse holes, when set-up unreeve top mast stay and set-it-up on the other side, hook runners & fore mast tackles and set-them up to the knight-heads come up the Fore stays and set-them up on Deck, unrig the flying jib boom and house jib boom and Fore Top Gallt mast; = Middle a stout-hawser around the bowsprit-and set-it-up on the Gun Deck and then fish the Bowsprit with the usual fishes, when it-is secure unrig up the mast, out-booms, reeve and set-up the stays, and make sail on the course, still keeping the hawse bent.

Accidents at Sea

Bowsprit gone.

Put the helm up cut away the wreck unless there be a good chance of securing it; brail up the Spanker and haul up the Main Sail, let go the Fore and Main and Mizen Top=sail Halyards when before the wind haul up the Fore Sail, unrave the Main Top mast-stay and set it up on Deck, hook runners and pennants to the lower mast-heads and set them up to the knight-heads, if the Fore stays and Top mast-spring stays are gone, get up the largest hawser you have, middle it around the lower mast-head, seize the two parts together and form a choker to the stays, lead the ends through the hawse holes and set them up, and the same with the Top mast; = In the mean time send down the Fore top gallant-mast and house the Main and Mizen, = If the ship was pitching or mooring heavy take in the Fore top Sail and house the mast; but not if it can be a= voided; = Rig jury Bowsprit as soon as possible and assume the course: If the ship has a tendency to broach too keep the Fore sail on her, as the sails on the Fore mast tend to steady it.

Rudder gone.

Steer the ship by the sails until the end of a cable can be got up over the stern, rig a spar across the stern, bend hawsers to the end of the cable and snatch them through blocks at the end of the spar run out about forty fathoms of the cable and lash it amid

ships

Accidents at Sea.

amidships to the taffrail and haul taches to the part of the hauser in board the action is wholy different from the Rudder:= If you want to go to Leward haul on the lee Tache, if to windward haul on the weather one:= Now back the Main & Mizen Top sail get the ship as easy as possible and ship another rudder, for instance a Buckinghams which can be expeditiously made on board and easily shipped

Carrying away Parrel of a Top=Sail Yard.

Clew up the sail, hoist the Yard close up and fit a new parrel, = If the parrel goes while blowing hard, the whole weight of the yard and sail is immediately brought upon the Top sail lifts, and the probability is that the first heavy lurch takes the Top=mast over the side, the yard should immediately be clewed down, the weather brace be well rounded in, and a pair of Butt slings be promptly rove & slopt as a substitute for the parrel parrel,

Struck aback in a heavy Squall with the Main sail on.

Let the foot rope of the Main sail and let it be split

Evolutions in Harbour

Clear Hawse

If the turns are low hook the clear hawse pennant, and bower the turns up above water sufficient to past the lashing below the cross; = have ready two hawsers and the Pennant tackle; stopper the chain forward of the shackle, bend one hawser to the last or end link take a turn around the bitts with it and unshackle the chain; = have two bowlines on the bowsprit ready to bend on and trice up the chain; = now ease away the hawser and when the end of the chain comes to the hawse hole bring one of the bowlines under the riding chain and bend on to the bight of the chain and the other bowline to the end; = ease away the hawser until the end comes to the lashing when bend the other hawser on the opposite side of the chain, and house in to the hawse hole, cast off the bowlines, slack up the first hawser, hook the pennant tackle and walk away it enough to allow for slacking off the lashing and hawsers, off stoppers and pay the gun below;

Should there be too much scope for a man to go down in a boat to go under the bows at bowline; = If the ship is riding with a cross and it is blowing very fresh and the cables are chafing much, back them at the cross. overhaul the cat-fall and secure the hook to the lower cable below the cross and haul it tought; bring a large hawser from the side of the riding cable and make it fast inboard to the lower cable, and with the assistance of the bowlins and hawsers get the cables and

Evolutions in Harbour.

cables and through one of the hawse holes on the same side as the riding cable bitt and stopper it - and chuse the other cable in the same manner without casting off the lashing or shifting the cat-& the other cable,

To Clear Hawse.

If the cable is hemp and one turn around the other hook the riding cable with a hawse hooke or pennant snatched or led through an block on the bowsprit - in the other end of this pennant is hooked a tackle, upon which hawse away until the turns are sufficiently clear of the water to pass the lashing, which should always be just - on the lowest - cross, pass the bowline into the hawse hole over all, bend on bowline on the cable forewards of the bitts, have hands forwards of the bowline to light the cable out - of the hawse hole, draw splice, ~~and~~ unbitt, and walk away with the bowline and run the bight - of the cable up to the bowsprit -, then bend on the bowline again somewhere about the forwards bitts, light - out - and run up to the bowsprit in the same manner, this will probably take all the cable out if the splice extends only in the tier, if not - a third bowline may be used in the same manner, have the hawse open but - to the end of the cable by which she is not riding and when it is out disengage it - over or under the riding cable as may be required: = Bend again to the tacks, and let the cable

Evolutions in Harbour.

run in through the hawse hole by easing away the boulines, should there be a round turn the cable must be run out again in the same manner as at first: = The Boulines should never be parted in, under a cable as it is frequently the case the cables get much cut and injured by those small ropes leading under them with so heavy a strain on them, often cutting through the wounding and into the cable before they are perceived.

Unmoor Ship:

Call all hands to "unmoor ship, Rig the fish davits, run the cat and fish falls, pass the messenger, knock up the stanchions, unship the ladders, ship the gratings, ship & unship the capstan bars, have leadsmen in the chains, and helms=men at the wheel and make all other necessary preparation, when ready bring too on the lee cable, knock up the pauls, heave taught, off stoppers, unbitt, and heave round, run=ning away on the riding cable, heave the anchor up to the bows cat and fish it, grapple the buoy, ship the messenger and bring too on the other cable, off stoppers, unbitt and heave in to the old service, if not going to sea bitt and stopper the cable, unship the bars, and gratings, ship ladders, clown stanchions, unship & trice up the cables and pay them below as soon as possible, if going to sea keep every thing ready for getting under weigh at a moments warning.

Evolutions in an Offing.

Set a Jib: blowing fresh.

Lay out- and loose the Jib, man with the haul= yards, haul aft- the sheet- and let- a good hands attend it,- clear away the brails and down haul, hoist- away, easing off the sheet- as the sail goes up and binds against- the stay bring care= fully not- to shake the sail, when up trim aft the sheet;=

Take in a Jib. blowing fresh.

Man the down haul, stand by the sheet- and haulyards, when ready let- go the haulyards and haul down easing off the sheet- just- enough to split the sail without- splitting it:= If the sheet- is kept- fast- there is dificulty in the sail down as the hauls bind against- the stay.

Set Top Gall^{t} Sails, blowing fresh.

Lay aloft- and loose the sails, man the sheets and haulyards, attend the braces, have hands by the clew= lines, and bunt-lines, let- fall, ease away the clewlines, sheet- home and hoist- away until the sail up or to a tow'st- leach easing off the weather brace, and trimming the sail as the yard goes up, when up belay the haulyards, steady out- the bowlines, and haul tow'st- the lee braces, = If blowing very fresh haul home the lee sheet- first- and then the weather one.

Take in Top= Gall^{t} Sail. blowing fresh.

Man the Top= Gal^{t} clewlines, buntlines, and

Evolutions in an Offing.

weather brace, attend to the haulyards, bowlins, lee brace and shut- = let go the haulyards and lee shut- and bowlins, clew down rounding in the weather brace at the same time mouse to square the yard or point it to the wind as the case may require; = when the yard is down let go the weather shut-, clew up and furl the sail.

B. Top Gall.t Sails usually have only one midship bunt line which leaves in the Top: = If the yard should carry away secure the sail to the cross = trees and send the fragments on Deck with the Top = Gall.t Sys or Royal Yd. &c.

Set a Spanker. Boom first

Man haul the lee topping lift = man the lee oar, top up the boom and brace it over on the lee Quarter, haul tow'rd aft and belay the shut- and bang; all man the out- haulers; = cast off the sail take away the braids, shut, guy, and bang, haul out first the sail

Take in a Spanker.

Man with the lee braids, have a few hands to take in the slacks of the weather ons, and a few to haul over the weather bang, guy, and shut-, ease away the out- = haul, brail up briskly haul over the shut, guy, and bang and cruise the boom, haul tow'rd the lee topping lift - and clap a stop on the foot of the sail.

Set a Top = Gall.t Stud.g Sail.

Man haul down and bunt the tack, shut- &c. haulyards, have a hand on the Top sail yard to rig out the boom and secure the bunt lashing, and one to cut the stops as the sail = goes up

Evolutions in an Offing

haul tought- the Top Gall^t. lifts, rig out- the boom, & hoist away the Sail, when the Sail is a little above the Top=Sail=yard, cut stops, haul close out- the tacks, hoist- the Sail tought- up & trim the sheet.

Take in Top=Gall^t. Stud^g. Sail.

Man the sheet- and down haul, have a hands on the Top Sail yard to rig in the boom, stands by the tack and head yards, ease away the head yards and hauls down on the sheet- until the Sail is nearly down to the Top=Sail yard, then ease away the tacks and let the boom come in, haul the Sail into the Top and make it up.

Set a Fore=Top=Mast=Stud^g. Sail.

Hook the buntlines on the Top Sail yard and hauls it- well tought-, haul tought- the weather top sail braces out- the Studding Sail athwart- the deck, one hand down the gear, and bend the tacks & head yards, take aft the tacks and boom braces and reeve them, have hands on the Fore yard to secure the heel of the boom and shift- the in and out=jiggers &c.c. Now pass two aguilgers around the sail the outer one to go over the head yards, and the inner one to secure the sail, cast- off the stops, and man well the Head yards, tacks, and in and out- jiggers, have hands by the deck sheet, down- haul and aguilgers, now haul tought- away the Yard up and down, rig out- the boom pass the heel

Evolutions in an Offing

lashing and hoist away. when the sail is clear of the Fore brace haul the toggle of the outer aquil gye out and take in the slack of the tack, when a little above the Fore yard, haul out the other aquil gye and close out with the tack, hoist the sail tought aft, over the short shut and trim the sail, shift the in and out jigger, shut and clown hauls, & haul tought the boom brace & topping lift.

Take in a Fore-Top-Mast-Stud & Sail.

Man with the Deck shut & clown haul four hands enough on the in & out jiggers to rig in the boom, and hands on the lower yard to cast off the heel lashing & stop up the yard attend the short shut in the top, & stand by the tack & haul yards on deck, when ready walk away with the clown haul, take away the haul yards & haul the sail close out to the tack and=tackle it is boom inboard, when take away the tack and short shut & haul the sail down on deck, then cast off the heel lashing, rig in the boom and unhook & trice up the yard, let go and unhook the buntons, and make the sail up ready for setting again and stow it on the boom or some other convenient place. N.B. The top tacks are generally rigged so that the yard tack purchase can be unhooked from the top pendant & hooked to a strap on the yard for a bunton.

et a Lower Stud & Sail.

Get the sail on the Fore castle athwart the yard walk up the

bunt on the haulyards and out-haulers & hoist the inner haulyards, clap a Spritsail on the sail as a stop and haul well to windward—The Fore brace lifts & trusses and Top mast-stay sail boom braces & top sail lifts, now one hand down and hoist the swinging boom top sail lifts & take the bizaar well out—on the Fore yard, man well the swinging boom top sail lifts and forward guy, attend the after one, top up the boom and get it a little abaft—The Fore yard with the guys this done man well the out-haulers & inner & outer haulyards, have hands to attend the shute and clewlines all haul out the Spritsail if blowing fresh make fast—the long shute if not let it alone round up the inner haulyards, and hoist away on the outer ones observing to slacke the shute & inner haulyards as it becomes necessary, when the sail is about half way between the lower yards & lower booms, haul out the Spritsail & clew out the tacke, hoist the sail close up & trim the shute & inner haulyards.

Take in a Lower Stud^{g} Sail.

Man well the long shute, clewline, Top sail lifts and after guy, attend the haulyards, out haulers & forward guy, clew away the out haul & clew up, let go the shute shute take away the haulyards and haul in on the long shute when inside the bulwarks lower away the inner haulyards and land the sail on deck, get the lower boom alongside, unbend the guy, make the sail up, take off the bizaar & stop the rigging in.

Set a Course blowing fresh.

Man with the tacks and sheets, stand by the weather lifts and lee braces, clew garnets, buntlins & leechlins, haul aft on the yards to run home the rigging, ease away the lee clew garnets buntlins & leechlins and haul aft the sheets, let go the top bowlins, ease away the weather lifts and haul on bowline the tacks easing off handsomely the weather clew garnets and top sail sheet if necessary until the tacks is down, when down trim aft the sheets, brace up the yards haul taught the weather lifts & haul taught &c.

Take in a Course.

Man with the clew garnets buntlins and leechlins, haul taught the lee lifts to prevent the skirts of the yards from carrying the luck of the top sail, stand by the tacks, sheets and bowlins, ease away the tacks & bowlins and haul up to windward first, haul up the weather buntlins & leechlins, ease away the sheets and clew up to leeward, haul the buntlins & leechlins close up & run home the lee lifts.

Set a close reefed Top-Sail

Lay aloft and loose the sail, man the bowlin buntlins & lines, have pulleys the top-sails & bowline yards, man the top sail sheets and haul yards, have hands by the clew lines and buntlins, lay out and loose, ease away the lee clew lines & buntlins & haul the sheet close home, then ease away the weather clew lines & buntlins

Haul the

and get the weather shut home, man the haulyards, attend the braces & sway the yards up clear up the cask, haul taut up the braces & rolling tacks and steady out the bowlines.

Take in a close reefed Top=Sail.

Man the Top sail clewlines, buntlines & down=haul tacks & weather braces, have hands by the bowlines & lee braces when ready clear away the bowlines & ease away the lee braces so as to take the strain off the lee rigging but not so as to shake the sail, let go the haul yards & clew down, ease away the weather shut and clew up hauling up the buntline at the same time, then ease away the lee shut and clew up to leeward, haul taut up the haulyards & rolling tacks & lay out & furl the sail.

Reef Top=sails.

Call all hands to "Reef Top=sails" Aloft Top=men man the Top sail clewlines, buntlines, down=haul tacks, and weather braces, attend by the haulyards, bowlines & lee braces. See the Top=gallt shuts clear, haul taut, clear away the bowlines, round in the weather braces, ease away the Top=sail haulyards and clew down attending the boom tricing lines in the Tops. haul out the reef tacks, haul taut up the buntlines, haulyards, & braces, point the yards to the wind so as to spill the sail & if in a heavy sea hook & haul taut up

the rolling tacks, stand by the booms, trice up, lay out & ruf, light-
ens to windward first & pass the earings from forward over the
cleat, down abaft the yard & up through the cringle again,
haul the dog earing well up on the yard
when the weather earing is pulled light-ens to, stretch the
band tought along the yard and expand the earing square a-
long the yard, haul tought the ruf points and tie them clear of the
Top gall^t shrouds, down booms, and lay down from abaft, this
done man the Top sail haulyards, attend the braces & bowlines
clear away and ease home the ruf tacks, down haul tacks,
bunt lines and clew lines, Top-Gall^t Shrouds unhook the rolling tacks & hoist away
trimming the yard as it goes up, when up haul tought the braces
and steady out the bowlines,

The second & third rufs are taken in as the first; tak-
ing care taking care to lay each band so as to cover the pre-
ceding ruf in order to prevent chafing, In taking in the Fourth
ruf the earings are hauled up under the yard and out
to the outer cleat pulled around the yard and through the
cringle, haul both ends tought and pass the points as before
hoist the yard clear of the cap, steady the bowlines & haul tought
the braces, In taking in a close ruf the shrouds are some times
be on both
stowed, and if going before the wind blowing heavy it is pre-
ferable to clew the sail up. In a last ruf the earing lays
under the yard.

Reef a Course.

First haul up the sail, haul tought the braces, lifts, trusses & rolling tacks, hook the buntons to the ruf pennants and haul them out, lay aloft two good men man the bow-trieing lines, trice up lay out & ruf. (The ruf single with only lay clear of the head earing a little below it,) be carefull to tie the points clear of the Top sail sheets, down booms & lay down.

Turn out all Reefs

Haul tought the ruf tacks and buntlins, let go the bowlins and settle a little of the Hauldyards, start the tacks & sheets of the Courses haul up a little of the clew garnets & buntlins and out with the ruf tacks, send a few hands on the yards to cast off the ruf points commencing in the bunt and going out on the yards until all are cast off when take away both earings together and so on casting off one ruf at a time, when all the ruffs are out man haul the ruftacks, clew-lines, buntlins &c. attend the braces & hoist up the yards lifting up the rigging at the same time board the tacks & haul aft the sheets of the courses.

To bend a close reefed Top-sail.

Get up and examine the sail, see that it is not deficient in ruf points &c. and if the sail is a new one get the head on a stretch on Deck, ruf it on the foot, so as to

leave out the clews, bowline bridles, & foot-, then make up the sail snugly and on hand down & bunt the top bunton to the clews of the sail, have two jiggers on the pacific irons on each yard arm to answer for yard ropes, hook them to the first-reef earings and stop the head earings to it-, haul taught the haul-yards, braces, and rolling tacks, sway the sail up a little above the top sail yard, then hook the yard ropes, toggle the buntlins & bowlins, over the clewlins & reef tacks and clinch the top sail sheets, trice up the booms & some men on the yard now man the yard ropes and haul out, get the sail taught on the head, ease away the yard ropes until the sail is even with the yard, bring the head square and taught to the yard [It is genually the custom among old sailors to nick the sail down but as the sail will not stretch, and the bolt-rope only gives it must start the sticks in the sail, and make it objectionable] pass the head earings, secure and tie the rope-bands, unhook the jiggers and haul out the reef tacks, cast off the first-reef and take it to the yard arm so on with all the reefs successively and set the sail as before.

Furl or bend a close Reefed Top-sail.

Take the top sail in, haul taught the rolling tacks, braces & haulyards, send the men on the yard to cast off the rope-bands, bunt the sheets on the top-gallant-

Top gallt yard rope to the hunt of the sail and stop to the weather quarter of the sail, pass a lashing around the sail to secure it cast off the ruf points and gaskets and pass the ruf points around the sail, have a tripping line bent to the lee head earing & taken to the weather side of the deck, unrave the sheets, cast off the ruf tackle, bowlines, buntlins & leech ropes and single the clew lines to assist in sending the sail down, now haul taught the yard rope & cast off all the rope bands, If you with to send the sail down to leward take away the weather earing first, but if to windward take away the lee one first, lower away the yard ropes, lead the sail clear of the Top, haul down on the down haul and lower the sail on deck [If in a ship where a long yard rope is not always kept up the buntlins & clewlins will be sufficient to send the sail down with, and when in a hurry it is always most expeditious, in the U. S. Frigate United States a jack block was not used but a long yard rope of hide was always kept over.]

To shift a Course.

Take it in and furl it, using the usual precautions of hauling taught the braces, lifts & trusses, get a yard rope on each yard arm, cast off the gaskets and rope bands and pass the points of a long fearing gasket around the sail. cast off the earings take away and lower the sail down on deck by means of the clew garnets, buntlines,

buckles & yard ropes, examine the sail to be sure up get the head on a stretch, lay it across the deck and hook the jiggers to the first reef cringles, reeve the clew garnets and buckles, toggle the buntlines and stop them to the head of the sail with one of the rope bands so that they will reeve through it— send men on the yard, man the yard ropes, buntlines, buckles & clew garnets, away up and bring the sail square to the yard, unhook the yard jiggers and hook the reef tackles to which hook the buntlines, take a reef in the sail if necessary, unhook the buntlines & set the sail, out bowlines &c. &c.

In an Offing prepare for Sea.

Discharge the Pilot, set up the boat jibs, have one boat in readiness to lower at the shortest notice have life buoys on the quarters and a man stationed by them with an axe ready to cut them away, get the anchors on the gunwales and secure them well, unbend the buoy ropes & cables and stow them below (& the messenger) when dry, put the buckles in the hawse holes, unrig the fish davit and unreeve the gun, get chafing mats on the yards in the wake of the backstays &c. &c. and put a stretcher on the fore & after stays under the foot of the fore sail &c. &c. Take the bearings & departure, beat to quarters, load & secure the guns, put on the muzzle caps and see every thing ready for immediate

use

the lower gun decks guns are now loaded.
To secure the Anchors cut & pass the cat-heads stoppers, and put on the chain painters, having a shot under the palm of the inner flukes to keep it clear of the Deck.

Clear ship for Action.

Beat to quarters & if at night stow the Hammocks, muster every individual at his station, and the Decks, sling the yards & gaffs in chains, stopper the clews of the Top sails and rove preventer braces, hook the pennant-tackles and have all the buffs & stoppers ready in the chains & top swabs abt the stays, hook relieving tackles & have a spare tiller ready for shifting in any thing away aloft and endeavour to carry sail if not contending for position, light the lights in the lights rooms and bathe lanterns if necessary, fit the fire tubs ship the gratings, put on the tarpaulins, let down the fire screens and cut those about the hatches, fill the match tubs & light the matches, see the division bills at the divisions & passing ropes up, have spare wads, tuck touchings, tackles, rammers & sponges in readiness, and at each division an allowance of water for the men to drink, take down all the bulk heads that are in the way and cause out the arms belonging to the men, and cast loose the guns, see that every man has a coat stop-

have whips ready for sending shot out of the holes, have boarding pikes & battle axes convenient, the engine rigged & filled the pumps rigged & pitched, shot-plugs in the ports ready for using, water in the magazine passage, half ports down, boardings misdec Thompsons out, train ropes & tuffs hooked down each guns tackles, & Powder boys at each guns with a cartridge in his box.

Station the Men for tacking Ship.

Man the flying jib down haul & jib sheets the weather spritsail braces & Fore & Main clew garnetts, man the lee Fore & Main tacks, weather sheets and lee bowlines fore & aft. Man the weather Main & lee cross jack braces, lee Spanker boom topping lift and weather Spanker sheet, guy & bang, attend the flying jib sheet & halyards, and jib sheet and a hand out on the bowsprit to light over the pennants, attend the lee spritsail braces, the weather Fore & Main tacks & lee sheets have hands in the Tops to over haul the lifts & braces and lee abaft and abreast the back stays are attended the outrigers and royal braces & bowlines, have hands in the chains to over haul the sheets & backstay falls and one on the bumpkin to over haul the Fore tack, attend the lee main & weather cross = jack braces, stand by to let go & over haul the weather Spanker boom topping lift & lee sheet, guy & bang. station four men at the wheel and a Quarter Master at the Com, the men to go when the yards are swung from the after braces to the main tack and sheet and from them to the Fore tack, Keep her full and by when ready give the orders "Ready! Ready! to

Tack Ship.

Ease the helm down, as she comes too haul over the slacks of the Spanker sheet & haul tow[illegible] the lee boom

topsail lifts, as soon as the helm is down give the order "helm a lee! haul down the flying jib and cast off the jib and Fore sheets when the ship comes too so as to shake the weather leaches of the square sails give the order "Ride Tacks & sheets! the clews of the courses are then raised a little above the Bulwarks so as to clear the hammock nettings, the effect of the wind being now off the sails one hand the lifts & braces, come up, one hand and brace aft the weather backstays, the ship will then continue to come too, and when she brings the wind about one point on the weather bow or loses the wind out of the sprit sail give the order "Main sail haul! brace round briskly the after yards hauling forward on the lee Fore & Main topsail bowlines at the same time, haul aboard and set up all the lowest backstays, rig out the outriggers if any haul on board the main tack, brace sharp up the after yards and haul aft the main sheet- haul the bowlines, lifts braces &c. as the ship passes the direction of the wind cant the spritsail yard & shift over & haul aft the jib sheets, hoist the flying jib as soon as it will take and brace the sprit sail broad over on the other Quarter one hauling the lee topsail up on the weather brace topsail lifts, if she has now lost her headway right the helm, but if she has stern board & is falling off shift it to fill the after yards, when the after yards fill, give the order

"Let go and haul"! Brace round briskly the head yards, haul forward the Foretack & Bowlins, should she fall off too much a-vast bracing and keep the head sheets flowing until she comes too then brace up and gather aft: haul down the Foretack and brace the Fore yard sharp up, get the tacks close down & sheets aft, trim the yards steady out the bowlins, haul tight the weather lifts & braces set up the backstays & rig out the outriggers, clear the decks &c.

If she misses Stays. having swung the after Yards.

Haul up the Mainsail, brail up the Spanker & lay the After Yards square, keep the helm a lee for stern board, haul the jib & flying jib sheets to wind-ward and when the ship has fallen off sufficiently brace up the after yards, trim the head sheets, round the main tack out Spanker trim the sheet & see every thing taught & properly trimmed.

If struck Aback. supposing ourselves on the Gard Tack.

Square the after yards, brail up the Spanker put the helm to port & while she has head way observing to shift it for stern board as soon as she loses her head way in this situation she will fall off briskly till the after sails fill, at which time as she gathers head way shift the helm a Starboard, and when the Spanker will take the right way

haul it- out- brace up the after yards & brace up the fore; - when by the wind, haul aft the fore sheet & right the helm.

In this evolution the helm must be used according to circumstances, - if when the after yards are aback she has stern board and you want her to go to Port put the helm to port &c. In narrow channels in a ship that forges a head much brace in the Fore top sail yard to check her head way, and in light winds when doubtful of staying, as soon as the sail is aback brace it up again and when taken aback in light winds the evolution will bring her back on the same tack without bracing the head yards.

Tack Ship under double reefed Top-sails. in a hard gale.

Station the men as before, when ready haul down the jib and Fore top mast-stay sail. put the helm down and brace in a little the Fore top sail yard keeping every thing clear forward, when the sail is aback brace it up again & the main tack & sheet. when the wind is on the weather Bow Main sail haul! hoist the jib as soon as it will take and proceed as before If the ship has stern board before the head yards as always shift the helm &c.

Veer Ship under Royals on the Starboard Tack

Station the men as in tacking, with the exception that

that the main tack mun and brace mun are to haul up the main sail & brail up the Spanker

proceed to haul up the Main sail & Spanker and haul flat aft the jib & flying jib sheets, put the helm up mun haul the lifts & trusses and clear away the bowlins, keep the after yards shaving, until they are square, then mun the weather head braces vize Fore tack & sheet, clear away the head bowlins and lay the head yards square, when the ship is upon the wind brace abreast & set up the Larb^d back stays & brace abaft the Starb^d ones, top up the Spanker boom and get it over on the Starb^d side, brail up the jib & cant the Spritsail yards, then mun the Starb^d Main & Larb^d Cross jack braces, Main tack & sheet & Spanker out haul, when the wind is about two points on the Larb^d Quarter brace up the after yards haul on board the main tack, shroud the sheet & haul out the Spanker, trim sharp up the after yards and when the weather leach of the head sails begin to lift, brace up: = as she comes to the wind haul aft the jib sheet: = right the helm trim the yards, as the tacks down & sheets aft, haul taught the braces, lifts, & trusses & set the bowlins

Ireen- Ships under- Storm Stay= Sails

Station the mun as in wearing, clap a lashing on the bunt of the Fore=Sail, cast off the weather

gaskets, put the helm up, haul down the mizen storm sail, ease
haul the after braces and keep the sails pointed to the wind
until they are square casing of the main stay sail shut to increase
the velocity of the ship haul taught the after trusses & lifts: = brace in the
head yards and when before the wind lay them square and haul taught
the lifts and trusses when the wind is on the quarter haul down the
main staysail and shift over the sheet, set up the back stays
get out the out riggers & carry the spritsail yard [should there
be a heavy sea following the ship right the helm until it is
passed then bring her too handsomely] ease haul the weather
back stays, lifts, & trusses and brace the after yards sharp up
when the wind is one point on the quarter hoist the mizen
staysail, haul down the Fore & ease the helm; = as the
wind draws abeam hoist the main storm staysail & brace the
head yards to the wind, as she comes to her course right the helm
brace up the head yards and hoist the Fore staysail
haul taught the weather braces lifts & trusses & ease the
back stays well set up: = If the ship will not go round
when she gets into the trough of the sea haul on board the
Fore tack to give her head way and put her under the
command of the helm which will pay her off, If the
main top sail should be set keep it full ~~& by~~
time also the time & do not let it lift.

Veer-Ship short on her keel.

Man the main clew garnetts buntlins and leechlins and spanker brails, up main sail & spanker, put the helm down and let the ship come up until she loses her head way. when brace abox the head yards, or if danger is ahead put the helm up and brace abox the head yards, haul abaft the weather braces stays and haul the weather lifts &c. &c. keep the after yards shivering and when the wind is on the Quarter fill the head yards and proceed as in wearing.

Box-haul a Ship.

This is done to avoid danger a head and on the lee Bow Put the helm down up main sail & spanker with a view to prevent her head way, when she comes up & loses her headway, brace abox the head yards haul over the head sheets and shiver the after yards, keep the helm a lee to answer her stern board which the ship will now have & she will go short round on her keel, as soon as her stern board ceases shift the helm, and when before the wind square the head yards & proceed as in wearing.

Clubhauling

Get up a stream cable and bend it to the lee anchor call all hands about ship, man handy by the lee anchor, the cable rangers, bitts and stopperer, and hands in readiness to cast it away, get up a hawser take the end thro the lee Quarter port, forward and clinch it to the ring of the Anchor, have a range of the spring on deck and axes in readiness, case the helm down, haul aft the Spanker sheet handsomely, when the wind is out of the courses "Ease tacks and sheets", man haul the lifts and braces, and brace aft the backstays, as soon as she is at a stand, Right the Helm Stream the Buoy & let go the Anchor, case the helm from down wind, when nearly head to wind haul taught "Main sail haul." when the wind is a head cut away the cable, brace up the fore and cant the spritsail yd, when she has fallen off sufficiently "Let go & haul, meet her with the lee helm. case the spring, ease the tacks close down, sheets off, and trim all sharp, set up the backstays, haul taught the braces lifts & trusses clear up the decks, & pipe down.

Close hauled on the Larb^{d} tack Ship comes too against her Helm & brings the wind on the Starb^{d} Bow say one point Recover her on the same tack in the shortest manner possible.

When you observe her coming too put the helm up and flatten in the head sheets if she still comes too haul up the Main sail & haul up the Spanker, rise Fore tack & sheet clear away the head bowlins and brace sharp abeack the head yards, but if too much time has been consumed and the wind is brought on the Starb^{d} Bow and the Ship gets stern board square all the yards and when the square sails begin to lift on the Starb^{d} tack Ship the helm a starboard & brace full the head yards and haul aft the Jib sheet, when stern board ceases proceed to brace and bring her on the same tack again, but if she should gather stern board before the wind gets on the other bow put the helm a Starb^{d} and throw every thing square Fore & Aft which will give her head stern board and the Rudder will have a double effect when she falls off about six points brace full again the head yards & right the helm then brace up the after yards & trim every thing.

Going large under all drawing sail Struck by a squall.

Put the helm up, up Main sail & Spanker, let run the Royal head yards take in the Top gall^{t} Stering sails and the Top gallant sails, and bring the wind a little on the

other Quarter to breakm the Staysails & Stering sails; clew down the Maijor Top=
sail, when the ship is nearly before the wind right the helm and take
in the boom & topmast Stering sails if possible, rig in the booms off buntons &
lizard down jibs flying jib & staysails & set the Fore Top mast staysail, then
clue down the Top sails and haul out the ruf tacks, bring the ship on
her course & ruf is necessary, but never let any thing if it can be a=
vided,

Going large wind hands forward.

Mind the weather helm so as not to get aback, attend
the Stering sail tacks, after guy, & weather head braces, ease off the ster=
ing sail tacks, boom braces &c. and brace up the head yards. having
frapped on the Fore tack & vee hauling the weather truss tie lifts &c at
the same time, then trim the after yards, haul tought the lifts & trusses
& ease the Stering sail tacks well out & the sails well up & trimed.

Wind hands Aft.

Haul up the Main sail & braid up the Spanker, clear away
the bowlins & square the after yards, then rise Fore tack & shut clear
away the head bowlins and square the head yards, haul down
the flying jib and braid up the jib, haul tought all the boom
lifts and trusses and set up the back stays &c. square the spritsail
yard & crotch the Spanker boom hook the buntons and set Ster=
sails if you wish,

Going large under Fore = Sail & Main-top-Sail brought by the lee. suppose the wind on the Starb^d quarter.

Put the helm hard a Port, man all the Starb^d braces & Fore clew garnetts Lab^d Fore tack & Starb^d sheet = haul forward the Lab^d fore tack & bowline, mar haul the weather trusses & lee lifts & back stay falls, clear away the bowlins and braces around the head yards, and brace the main top sail hardy full [if you shake it, it will split] when the yards are braced round run the ship on her course, haul taught the lifts & trusses, & set up the weather backstays &c

Going large broach too.

Put the helm hard up, flatten in the head sheets, man the lee head braces haul forward the weather fore tack & bowline and brace up the head yards keeping the after yards lifting until she is brought to her course, when trim every thing.

Going large haul on a Wind.

Take in all steering sails, ease in the booms, off buntons, trice up and stop the gear in, mar haul the lifts & trusses and brace the lee backstays abaft; = Put the helm down & brace up the after yards and set the main sail & spanker if not on her, and as the wind draws forward of the beam brace up and gather aft; = Trim the yards haul aft the sheets haul taught lifts & trusses & haul the bowlines.

Going free with Steering Sails set a Man falls overboard.

Put the helm down ease off the Lee sheets & cut away the

life buoy. and stand the crews of the lee quarter & waist boat in them to be ready for lowering as soon as the ships head way ceases, let fly stearing sail tacks, brace sharp up the main & mizen Topsails take in the stearing sails & haul up the courses letting the Fore top sail stay aguara, as soon as her head way stops lower away the boats & send them to pick up the men. = By bracing up the main & mizen topsails & hauling aft the sheets and heaving to with the Fore top sail to the mast the ship comes quicker to the wind and if blowing fresh gives a better chance of taking in the stearing sails.

Ship on fire.

Beat to quarters, first thing, [and if the fire is forward put the helm up and take in the courses & haul up the Spanker But if the fire is aft hand on the wind,] close in all the Starboard Ports See every man at his station, [if at night pipe up the hammocks] wet the sails, rig the engine; have every thing ready for drowning the Magazine, firemen in the gang ways with fire buckets, have hauling lines from the tops & yards to haul up water, and if necessary hook the runners & pennants ready for hoisting the boats out. put the fire out as speedily as possible and without confusion or noise, The Marines are to parade on the Quarter deck with loaded muskets and fixed bayonets during the fire and no man is to leave his quarters on pain of death except those appointed to put the fire out.

Wind on the quarter all Steering Set reduce Sail in order.

Man the Lower Studding sail clew lins inner haulyards & sheets. The Top mast Studd^{g} sail down haul the in board jiggus boom topping lifts and After guys, Stow hands by all the tacks & haulyards, & out haulus and man Aloft to cast off the Gaskets & rig in the booms. haul to windward in all Studding sails rig in the booms & trice up the guys, get the Lower booms along side & take off the buntons & Lizards, Then man the Fore & main clew garnetts buntlins & leechlines Top gall^{t} & Royal clew lins & weather braces & flying jib down= haul, haul to windward in Royals & Top gall^{t} sails, up courses & down flying jib

Wind on the Quarter under Top Sails & Jib proceed to make all drawing Sail.

Call all hands to make sail Lay aloft and loose the Royals & Top gall^{t} sails man the sheets & haulyards and attend the braces, man the Fore tack and sheet and flying jib haulyards, haul to windward, let fall, sheet home & hoist away, Stow the Fore tack & haul out the Spanker and haul aft the Lee clew of the Main sail, haul to windward the weather Fore brace, lift & Studd, get the Lizards out on the Fore yard a Lizard on the Top sail yard & set the Studding Sails trice up the Stay sails & man the haulyards, clear away the down hauls and hoist away.

Going large signal is made to bring too on the other tack under double reefed Top sails

In this evolution it is required to reef Top sails & Lay one of them to

the mast-, the most eligable is the main when no rebel is near to wind-
ward on the same tack, but if there should be one back the Fore top sail
Reefers sails to Top sails, fit & set the sail, [the Fore sail is kept on
in order to increase the head way] man the weather main & fore
cross jack braces all the clew lines, bunt lines, down haul tacks,
and weather top sail braces, have hands by the halyards, bow-
lins & lee braces, clear away the bowlins & lee braces, round
in the weather braces, let go the Top sail halyards & clew down
now up helm, square the after yards, & haul out the ruf tacks,
keep the braces well tought, true up the yards, lay out & ruf
when before the wind if blowing fresh haul down the fit and
hoist the Fore top mast stay sail, square the head yards &
haul up the Fore sail, brace abaft the lee back stay & over haul
the lee lift, set up the weather back stay, top up the spanker
boom & man the out haulin, by this time the Top sails
should be reefed, if so down boom, lay down from a lift
over haul the ruf tacks clewlins & bunt lins & down haul tacks,
as she comes too ease off the stay sail sheet, man the lee head
& weather cross jack braces, & when the wind is on the quarter
brace sharp up the cross jack yards, haul out the spanker
and brace about half way up the head yards until
she comes too, then light up the rigging attend the braces & hoist a-
way the Top sails, brace aft stay sail sheet, trim the Fore & Main yards, haul
tought lift & Ruddy out bowlins &c &c.

Going large bring Ship to the wind under double Reefed Top-Sails.

Reduce Sail to Top sails, Jib & Spanker, bring the Ship to the wind when clew down and rise.

Prepare to Anchor.

Make signals for a Pilot clear the shot-out the detaching guns. range, bitt and stop the cables, get the Anchors off the Bows ready for letting go, bend the buoy ropes, & have the buoys ready, see the tiers clear, & hedges and hawses ready for immediate use, get up the Messenger, nippers & cap stan bars, bower ropes & chain hooks. knock up the stanchions & have the gratings ready for shifting and the boats ready for towing the Ship. send down all the mast from the rigging & Spars, see that nothing is towing over board, that the ports are square, that all the rigging is taught, that the light yards are squared by the lifts & braces, that the Top Gallt & Royal masts are neatly stayed, that the clew jiggers are hooked, that the steering sail gear is unrove, that the Officers & Men are in their proper uniforms & clean, and if you with to make a hand some come too, that the tacks, sheets, & clewlines are singled, and that the Bowsprit shrouds are unhove ready if they interfere with the letting go of the Anchor.

Going into Port before the wind anchor & moor ship with an open hawse to the East^{d}

Having made the necessary preparations for anchoring, stand in with the wind aft—or abaft the beam under Top sails and Jib, when abreast the birth haul down the Jib and put the helm a port clew up the Fore & Main Top sails and haul out the Spanker. when the Mizen shakes lay it Square and when she comes to a stand let-go the weather Anchor, haul up the Spanker & run away until you reach the second birth, when let-go the other Anchor, moor sail, bring too the riding anchor & heave in to the proper mooring, bitt stopper & secure the cable & clear up the Decks.

Harbour running East & West wind from the N^{d}. entrance on the East side anchor & moor with an open hawse to the East^{d}.

When off the land make preparations for anchoring ship, get the Pilot on board & call all hands, reduce sail to top sails, Jib and Spanker, have leads-men in the chains, stand in as the Pilot may direct, stand in beyond the birth, heave in stays and stand along the weather shore, when near the birth clew up Jib, up helm, & haul over the Spanker sheet, when the Top sails begin to shake clew up the Fore & main, Square the yards and settle away the Top sail braces, when the yards are on the cap Square the Mizen

Top sail

Tending Ship

Mizzen Top sail & when she looks head way stream the buoy, let go the Lard. anchor & haul up the Spanker, run to the second bitts let go the Starb'd anchor clew up the Mizzen Top=sail and furl all the Sails bring two on the riding cable & heave in run away the Lee anchor untill the shackle of each is a=bout the bitts, [put a seizing on the cables if hemp & mats in the hawse holes, run out to the seizing put on the check stoppers & bitts] get out the swinging booms, the messenger, nippers & below unship the bars, off gratings, clear up the decks & if in a strange Harbour sound around the Ship.

Tend Ship at single Anchor. riding by the Lard. Anchor to wind=ward tide,

When the tide slacks, hoist the Fore=top mast-stay sail with the Lard. sheet to wind ward & port the helm, the Ship will shoot over to Starb'd raising the cable taught, when abeam of the buoy haul down the staysail & let the Ship fall off with the tide, when the staysail is hauled down shift the helm from starn board to keep her from going around her anchor; = At neap tides the Ship must be cast back the same way.

Tend to leeward. In other words if the Ship is riding by the Lard. Anchor when the tide slacks the Ship will swing around ready on which hoist the Fore Top mast-staysail [and if this hangs the Ships head off two much & causes her stern

to shoot to windward of the cables again. hoist the Mizen Staysail which will counteract the effect of the Fore top mast staysail, in this situation the ship will keep the Cable on the Larb.d Quarter.] = Take ahead of the buoy haul down the staysails and let the ship lay to the wind under [if riding by a chain but if the ship is riding by a hemp cable the Mizen staysail or Spanker must be handed down and the cables kept taught until they points to ahead of the buoy, at which period shift the helm for stbd tack & haul down the Fore top mast staysail and the ship will lie to the wind.

Ship riding to the Southward tide, & wind at E.N.E. strong so that points.

Loose the Mizen Top sail sheet & home & hoist it up brace the sail aback & put the helm a port for stbd tack when the ship falls off six points & square the Mizen topsail under if the wind continues from the Eastd brace the yards up the contrary way and put the helm a stbd to counteract the ship lie in this position as long as the tide has no effect on her, but when the ship begins to feel the power of the tide clew up & furl.

Wind across the tide.

If both are of equal strength the ship will lie ballanced between the wind & tide, and if the wind is fresh

is fast, the ship will require no sails, but keep on to get cable & fall with the tide. But if the wind is light hit the Mizen Top sail Square and the ship will swing clear. if the channel is so narrow, or the wind blowing so that the ship cannot swing back on the same side of the Anchor that she came, heave in to the Anchor, let the ship swing & then run.

In a calm.

Heave in to the Anchor let the ship swing & when the tide sets run cable.

Back & fill in a Tide way. Ship on the Starb^d tack under Top sails, jib, and Spanker, == Having reached mid channel brace a= back the main & Mizen Top sails and brail up the jib for stern board, having stern board the ship will steer with her helm as usual as on ship in this situation will naturally fall off. As she falls off brace in the head yards so as to fill the sails, and brace up the after yards so as to bring her to the wind, shift the helm a lee & brace up as she comes too, when again in mid channel proceed as before, should the wind or tide set her on the other tack by wearing or staying and proceed to beat as before, should she come to a narrow passage

just only sufficient sail on the Ship to keep steerage way on her just before the wind & shoot through

Anchor in a Rocky Bottom.

Find as near as possible the depth of water you are going to anchor in, unbend as many fathoms of the cable out of the hawse holes, have bolts in large casks to the cable to keep it up & down & then when ready let go and veer.

Come too with 4 Anchors ahead.

Make every necessary preparation, the cables bent & bitts and range the cables in the following order, The weather shoot bitts to the forward bitts & range forward, The weather Bower range abaft, The lee Bower forward & lee shoot abaft, The Stream cable bent to the plums of the weather shoot, see the turns all clear and cables well stopt, then get the anchors off the Bows ready for letting go. Stand in under Fore, Main & Mizen storm Staysails, when abeam of your bin the let go the Stream anchor Stand until the cable is nearly taught then let go the weather shoot Anchor, when clear of the weather shoot let go the & when a strain comes on, then let go the lee Bower weather bower, as soon as this is done put the helm hard down and haul down the Fore & Main storm Staysails & haul flat aft the Mizen storm Staysail sheet then let go the lee shoot anchor and veer away untill all four ranges ahead so as to have an equal strain on each, see that

cables with stoppers and proceed to knock down all the lower yards except the Fore which keep up to stand out with in case of the wind's veering off shore, and the Topsail yards in the Tops and house the Top masts.

Riding at Ancor in a gale Send down Lower yards & house Top masts

Get up and hook the Top-blocks, rove the pennants, hook the Top tackles, & bend marling yarns to the Top-sail yard arms & bring them into the tops to clear by the yard after the Top mast are housed, get up & lash the gun pendant blocks, rove the pennants & bend them to the yards, Lash your guns & haul them tompht, hook tackles to the yard arms for grip cast off the lanyards of the slings & topsail sheets turn out the truss blocks and untoggle the Buntlins & leechlines attend the lifts & braces haul forward on the yard tackles and lower the yard until rove the gunwale when let the yards hang hook the rolling tackles & haul tompht the guns, lifts & braces, man the top tackle falls, attend the lanyards of the top mast rigging & standing backstays and come up with the breast-back stays and slacken the Fore & after stays away up the Top mast and knock out the Pin. then lower away and haul down on the rigging, when low enough parcel the Top mast in the wake of the Top mast-head and lash the top mast down,

bring the Fore & Aft-stays into the Tops
Clear Chank the Top mast-rigging and pass a line around
all the rigging in the Top and pass it in to the Mast-, now
Sack the falls haul away thing tought
Fid Top-mast & get Lower Yard-s up.

See the rigging clear for & Aft-, man the Top Tacks, away
up and fid the top mast-and set-up the rigging & stays
then man the lifts and Gun falls, attend the guys, un-
hook the rolling Tacks, and away up, taking through
the slacks of the braces, pass the Lanyards for the
slings and turn in the truss blocks, settle down the
guns and haul tought the lifts & trusses, unhook
the yard Tacks & guys & unreeve & send down the
purchases.

In an Open Road Stand at single Anchor. with Anchor and Stand out, No tide and wind fair.

Call all hands "up Anchor" get up, pass and Lash the Messengers, put on the gratings, Ship the Capstain Bars and Hoist them, get up the Nippers and bring too, Rig the Fish Davit and Rouse the Cat and fish falls and back ropes, have Jiggers &c ready for bearing the Anchor and have the other Anchor in readiness for letting go in case of accidents, and the Captains of Tops aloft to see all clear for making sail, have good Leadsmen in the main Chains and a Quarter gunner in the Fore Chains ready to grapple the Buoy, also have four hands down at the helm. Let the Fish be cleared away and the handspikes laid out. Man the Bars, have tow lights, off stoppers, and unbitt the Cable, have rounds, pay the clear Cable down in the Tier and range the rest on deck when the Anchor is up and down, put the helm on the side you wish to cast her, if for instance I wish to cast to port the helm must be put to port, because the moment the Anchor breaks ground the Ship will get Stern board, have rounds the Capstain and as soon as the Ship breaks ground and gets a cant hoist the Jibs, run the Anchor up to

the Bows, pawl the Capstain, grapple the Buoy and take it in the chains, As soon as the ship looses stern bound, right the helm and use it as requisite until she is before the wind, hook the Cat, bend the Mun on Deck to the fall, "haul tought the Cat"; "keep the Messenger"; "stick out the Cable" and "walk away with the Cat". when up "belay the Cat." pass the Cat head stopper, hook and haull tought the fish, come up and unhook the Cat, and walk away with the fish, when up, take a turn with the fish, pass the shank painter and unhook the fish, call all hands to make Sail, lay aloft Sail loosers man the loose tricing lines, "tricq up" "lay out" and "loose away" clear away the Spanker "lift fall" the Top sails, Top Gallant sails and Courses man the Top Sail Sheets and haulyards, sheet home, attend the Braces, hoist away the Top sails haul aft the Fore sheets, Sail up the Fife, man the Top Gallt sheets and haul yards sheet home and hoist away, loose, sheet home, and set the Royals, haul tought the Braces, lifts and tuers, hook and haul tought the Buntons on the Top=Sail yards and prepare to set the Stering Sails.

Note. It is the opinion of some that the Life ought not

to be hoisted until the anchor is secured, the 2d will not give her so much head way as to prevent the Cat and fish from being hooked, and it is certainly unseaman like, to let the ship be drifting under no management whatever, as she manifestly would without sail

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Riding to Ebb tide, Wind setting in, get under weigh and go to sea.

Make all the necessary preparations imagine her riding by the starboard cable, steer her from it with the Starb'd helm which will bring the wind on the Port Quarter, haul in to a short stay a peak, and the men on deck to make sail let fall, shake home and hoist away the Top sails loose the Jib and Spanker, man haul the lifts and tacks and brace Back stays on both sides and brace all the yards by the st- is point them near the wind so as to shiver them and destroy their effects which would shoot the ship over the anchor and cable and consequently damage it. top up the Spanker boom and lead along the out haul man the Bars and heave up the anchor, when the anchor is away brace the After yards sharp up on the Port tack the helm being still a Starboard

tacks to bring her to the wind on the Port tack, haul out the Spanker and lay the head Yards square when she will lay directly athwart the wind and tide, and be kept in that position with the use of the helm. Cast and fish the anchor while the ship lies this way which down, fill away the Fore top Sails and when she comes to the wind hoist away the Tiers, bound Fore and Main tacks, set Top Gallt Sails &c. haul home Spritt Sail and Trusses and down to anchor, having an anchor ready for letting go bitter range and stoppers.

Riding windward of Coast, get under weigh and stand out.

In this Evolution the winds are out, make all preparations paying due regard to the Braces, Lifts, Tracs, &c. as before, heave in to a short Scope and Moor her with the Starboard helm. if the wind is strong [illegible] on check to make Sails loose the Top Sails Courses Tiers, and Spanker top up the Spanker Boom and brail it down on the lee Quarter, let fall and sheet home the top Sails but do not hoist them as this sail will be just sufficient to keep the ships head way through the water, brace all by on the Port tack the helm being a Starboard down then with the wind on the Port Quarter, heave the anchor up to the Bows and as soon as it breaks ground Brace full the Fore top Sail which with the [illegible] will

keep the Ship under perfect command until the Anchor is Catted and fished, then man the Top sail haulyards attend the Braces, Clewlines, buntlines and down haul tackles, hoist away the Top Sails, trim all the yards and make sail, then after yards must be kept lifting to Cast and fish the Anchor which cannot be done while the Ship has way on her therefore keep just enough sail on her to steer the Ship.

Riding to the wind Side aslean get under weigh and Stand out before the Wind.

Heave in to a short scope, loose the Top sails Courses Jib and Spanker, shake home and Mast head the Top sails, If I wish to Cast to Port and fill on the Starb^d. tack I would brace my head yards in by the Port braces and the Starb^d After yards up by the Starb^d braces, due attention being paid to the lifts, Top Gallt Backstays Bowlins and so on. Put the helm to Port the current acting on the Rudder will force her Stern to Starboard, heave the Anchor up to the Bows when it breaks ground and up the Fish, as she falls off right the helm and brace her two with the Fore Topsail to the mast, till the Anchor is Catted and fished then fill away the head yards haul up

the helm, and shiver the after yards, when before the wind square the head yards and right the helm, then square the after yards set the Fore sail and Top Gallt Sails and braid up the Fore Course bitts and stopper the cable and have the anchor ready for letting go which should always be done in case of necessity, observing never to stow the anchors until you get an Offing

Riding head to tide and Wind with a Shoal on each Quarter. no room to cast weigh and stand out.

Heave to an short stay as peak, and the main sail ready to make sail, set the Top sails, clear away the Fore and Spanker, If you wish to cast to Port when clear of the shoals brace all the yards about half way up with the Starbd braces, this draws head in on the cable, as soon as the anchor trips put the helm a Starbd (the tide acting on the Port side of the Rudder will cast her head to Port) the sails being a back the wind soon gets clear board of the helm being Starbd will counteract the tendency the head yards have to pay her off to Port. in this manner she will drift with the wind and tide until you are clear of danger, heaving up the anchor as she goes astern, should she pay off too much before she draws the shoals brace sharp a back the Mizen Top sail, set the Spanker and haul over the Sheet, when you are far enough to clear the shoals put the helm to Port, braid up the Spanker, square the after yards & set the Fore when the head yards shiver square them as she gathers head way right the helm.

A Shoal on each Quarter and a Rock astern, get under weigh and stand out.

Make all the preparations necessary, have in to a proper stay and the men on Deck to make sail, clear away the Jib and Spanker boom the Top sails Courses and Top Gallt sails, if the wind will permit- shut home and hoist away the Top sails and Top Gallt sails, as I intend to cast on the Starb.d tack come up and brace abaft the Port breast-back stays and set well up the Starb.d ones. and over haul the Port boom lifts and Starb.d tackles, have hands by the Starb.d braces, and braces sharp up the after Yards on the Starb.d tacks, haul the Bowlines, lifts, tackles, and weather Braces, Counter brace the head Yards with the Starb.d braces and lay them a very little more than square, hoist the Jib and haul it to windward by trimming aft the Starb.d sheet, haul out the Spanker and brace the boom well over on the Port quarter, now man well the port-head braces, having hands to attend the Starb.d ones, Man well the Fore & main tacks, have hands to let go and over haul the rigging, now man the bars, heave round, and give her a stern with the Port helm. As soon as she breaks ground and gets a cast-, brace sharp up the head yards, shift over the Jib sheet, and board the Starb.d Fore and main tacks, meet her with the helm by keeping it a lee, continue to heave briskly at the Capstern till the anchor is up (another one should always be in readiness to let go in case of accident.

The Shore close on the Starb^d Beam, A heavy sea & Rollers setting in on the Port Bow, Light breezes coming from the same Quarter and not room to cast by the ordinary methods. get under weigh and proceed to Sea.

Get slip ropes on the riding cable unshackle and stopper the cable forward of the Bitts, Middle a hawser, pass the bight into the hawse hole and seam it with the chain get a Buoy and rope on the chain, veer one end of the hawser through the Starb^d and the other end through the Port after Port, hoist up the Top sail and Top gallant yards, and aloft the Sail loosers, cast off all except the bunt and Quarter gaskets, brace the yards sharp up Fore and Aft by the Starb^d braces, see the Sheets led along the Rigging clear and every thing in readiness for making sail in the shortest manner, Now slip the cable hoist the fish and veer in briskly on the Port hawser until she gets before the wind keeping her round with the helm.

When before the wind haul down the fish and haul out the Spanker, let fall and sheet home all Sail, slip the Port hawser and veer in on the Starb^d one as long as it tends to cant her the right way, slip it when no longer useful, in this situation she will come too on the Starb^d tack make all the sail you can carry and beat her off to a place of safety.

Riding at single Anchor, Wind & Tide setting out, Ships or Shoals astern get under-weigh with the least-possible drift.

Make the usual preparations for getting under weigh, observing to have the other anchor ready for letting go, the cable ranged, Bitted, and Stoppered, and hands stationed by the stopper and Shank painter ready to let go the anchor in a moment in case of need. now man the Bars and heave in to a long stay. now hoist-up the top sail yards without loosing the sails, overhaul the lifts and braces and let brace Backstays and &c. and brace all the yards sharp up on one tack, top up the Spanker boom and brace it over on the lee Quarter, lead out the Top sail Sheets, Fore & Main tacks and Sheets and Spanker out haul. clear away and hoist-the Fore and haul the Fore Sheet to windward This done man the Bars again, heave round briskly and when ready up. and down when her from her anchor with the helm, and thus assist-her to cast the way you wish, now make sail, by Sheeting home the Top=sails, and hauling on board the Fore & main tacks and aft-the Sheets observing the moment the tacks and Sheets are home to haul with the Bowlines now run the Anchor briskly up to the Bows, and as soon as the weather leaches of the Top=sails lift and begin to fill, right-the helm, haul out the Spanker, and shift-over the Fore Sheet. and if she falls off too fast-let-flow the Fore and Fore Sheet. stand on until clear of danger, when heave too and cat and fish the anchor. after which fill away on the course and make sail as required;= A ship riding to a four knot current will preserve her head way for a moment long enough to get the Sheets home, on the same principle that a ship towing a boat when under weigh. if the painter is cast off the boat will keep her head way for some time along side

Wind setting in and no tide get under-weigh & stand to Sea.

Call all hands up anchor, and the Captains of the Tops aloft to get every thing ready for making sail, Rig the fish, and secure the Cat and fish falls, clear away the Pike, get up and pass the Messenger, ship the gratings, ship, shift, and man the Capstan bars, get up the nippers and bring two forward of the Bitts, heave two turns, an bitt, and off stoppers, bring two abaft the Bitts and heave in to a short stay, then haul the capstain, stopper the cable and send the Men in clear to make sail, abaft sail loosen man the boom tricing lines, top sail sheets and haulyards, "tricer up" "lay out" and "loose" clear away the Pike, and Spanker, top up the Spanker boom, attend the braces and rigging, and when ready on all the yards, "haul tow'rds", "let-fall", "sheet home", and "hoist-away," hoist up the top sail rigging, attend the braces, and ease away the Top sail clew lines, so that the sheets may go home with out getting foul, now suppose the ship to be riding by the Starb.d cable and ease cable this way, now haul the lifts and tacks, if I cast to port, which is preferable, as it is casting from the anchor, brace abaft the Port Main and Mizen Braces back stays and Starboard Foreward ones, and brace up the after yards sharp on the Starb.d tacks and the head yards counter brace about two thirds up on the Port tacks, and haul the Starb.d Pike sheet to wind ward, man the haulyards and have the Spanker ready for setting, now man the Bars, heave round part the helm to Starb.d to give her a small sheer and when the anchor breaks ground right the helm, grapple the Buoy, and hoist away the Pike

keeping the stern &c. shute to windward if you have doubts of her going off. as soon as stern board commences shift the helm to port, hook the cat as soon as possible, and when the after sails fill right the helm, let flow the fish shute, haul out the spanker and help the ship with the fore topsail aback until the anchor is catted and fished (which should always if possible be done before the ship gets headway) when the cat is hooked, man the fish tackle through the messenger, stick out the cable handsomely so as not to get the chain on the stocks and weigh the anchor up to the cat head, pass the cat head stoppers, hook and haul taught the fish tackle, unhook and over haul the cat, sway up the fish and pass the chain to painter, and unhook the fish, and ship captain bars, off gratings &c &c. fill away the fore topsail, brace the fore and main tacks and sheets haul ~~taught~~ taught to braces, lifts, and trusses, off gratings, ship ladders, stow steam chains, and clear up the decks, observing always to have another anchor ready for letting go in case of accidents. cable bitted, ranged, and stoppered, as soon as you get a sufficient offing secure every thing for heaving cable, & pay them in the tiers below &c.